



June 29, 2022

**VIA ELECTRONIC FILING**

The Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, NE  
Washington, DC 20426

**Re: Revisions to ISO New England Inc. Transmission, Markets and Services Tariff to Modify the Process for Interconnection of New Distributed Energy Resources and Improve Coordination of Interconnection Studies; Docket No. ER22-\_\_\_\_-000**

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act (“FPA”),<sup>1</sup> ISO New England Inc. (the “ISO” or “ISO-NE”),<sup>2</sup> joined by the New England Power Pool (“NEPOOL”) Participants Committee and the PTO Administrative Committee (“PTO AC”) on behalf of the New England Participating Transmission Owners (“PTOs”) (together, the “Filing Parties”),<sup>3</sup> hereby electronically submits this transmittal letter and revisions to the ISO-NE Tariff (“Tariff Revisions”) to modify the process for interconnection of new distributed energy resources (“DERs”) and improve the coordination of interconnection studies.

As more fully explained below and in the Testimony of Alan McBride (the “McBride Testimony,” which is solely sponsored by the ISO), under the Tariff Revisions, which are contained in Schedules 22, 23, and 25 to the ISO-NE OATT, all new individual DERs will interconnect through the applicable state interconnection process. Pursuant to Order No. 2222, DERs that participate in the wholesale market exclusively through a DER aggregation will already be exempt from the ISO’s interconnection procedures and will always proceed through the applicable state interconnection

---

<sup>1</sup> 16 U.S.C. § 824d (2006 and Supp. II 2009).

<sup>2</sup> Capitalized terms used but not otherwise defined in this filing have the meanings ascribed to them in ISO-NE’s Transmission, Markets and Services Tariff (the “Tariff”) or the *pro forma* Open Access Transmission Tariff (“OATT”). Section II of the ISO-NE Tariff contains the ISO-NE OATT.

<sup>3</sup> Under New England’s Regional Transmission Organization (“RTO”) arrangements, the rights to make this filing of changes to Schedules 22, 23, and 25 the ISO-NE OATT under Section 205 of the FPA are shared by ISO-NE and the PTOs in the manner specified in the Transmission Operating Agreement between ISO-NE and the PTOs (the “TOA”). NEPOOL, which pursuant to the Participants Agreement provides the sole Participant Processes for advisory voting on ISO-NE matters, supported the changes reflected in this filing and, accordingly, joins in this Section 205 of filing.

process. The Tariff Revisions extend that treatment to individual DERs so that, in New England, all DERs will interconnect through the applicable state interconnection process. The Tariff Revisions also include provisions for transition from the current process under which some DERs interconnect through the ISO interconnection process to the new process under which all DERs will interconnect through the applicable state interconnection process. In addition, the Tariff Revisions improve the coordination of interconnection studies by establishing the order in which interconnection requests are included in the Capacity Network Resource (“CNR”) Group Study, and including generation projects that are not participating in the ISO’s interconnection process, if they meet certain conditions (as explained in Section VII of this filing letter), in the Base Case Data.

The Filing Parties respectfully request that the Tariff Revisions become effective on August 28, 2022, 60 days after the date of this filing.

## **I. DESCRIPTION OF THE FILING PARTIES AND COMMUNICATIONS**

ISO-NE is the private, non-profit entity that serves as the RTO for New England. ISO-NE plans and operates the New England bulk power system and administers New England’s organized wholesale electricity markets pursuant to the Tariff and the TOA with the PTOs. In its capacity as an RTO, ISO-NE has the responsibility to protect the short-term reliability of the New England Control Area and to operate the system according to reliability standards established by the Northeast Power Coordinating Council and the North American Electric Reliability Corporation.

NEPOOL is a voluntary association organized in 1971 pursuant to the New England Power Pool Agreement, and it has grown to include more than 500 members. The Participants include all of the electric utilities rendering or receiving service under the ISO-NE Tariff, as well as independent power generators, marketers, load aggregators, brokers, consumer-owned utility systems, end users, developers, demand resource providers, and a merchant transmission provider. Pursuant to revised governance provisions accepted by the Commission,<sup>4</sup> the Participants act through the NEPOOL Participants Committee. The Participants Committee is authorized by Section 6.1 of the Second Restated NEPOOL Agreement and Section 8.1.3(c) of the Participants Agreement to represent NEPOOL in proceedings before the Commission. Pursuant to Section 2.2 of the Participants Agreement, “NEPOOL provide[s] the sole Participant Processes for advisory voting on [ISO-NE] matters and the selection of [ISO-NE] Board members, except for input from state regulatory authorities and as otherwise may be provided in the [ISO-NE] Tariff, TOA and the Market Participant Services Agreement included in the [ISO-NE] Tariff.”

Pursuant to the terms of the TOA among the PTOs<sup>5</sup> and ISO-NE, the PTOs own, physically operate and maintain Transmission Facilities in New England and ISO-NE has

---

<sup>4</sup> *ISO New England Inc.*, 109 FERC ¶ 61,147 (2004).

<sup>5</sup> The PTOs include: Town of Braintree Electric Light Department; Central Maine Power Company; Maine Electric Power Company; Chicopee Electric Light Department; Connecticut Municipal Electric Energy Cooperative; Connecticut Transmission Municipal Electric Energy Cooperative; Versant Power (f/k/a Emera Maine) (Bangor

Operating Authority (as defined in Schedule 3.02 of the TOA) over all of the Transmission Facilities of the PTOs, including those used to provide Local Service over non-Pool Transmission Facilities under Schedule 21 of the ISO-NE OATT. Section 3.04 of the TOA also grants the PTOs authority under Section 205 of the FPA to submit filings to the Commission in matters affecting the rates, terms and conditions of Local Service under Schedule 21 and rates and charges, including cost allocation, for Regional Transmission Service under the ISO-NE OATT.

Correspondence and communications in this proceeding should be addressed to:

**ISO NEW ENGLAND INC.**

Margoth Caley, Esq.\*  
Senior Regulatory Counsel  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040  
Tel: (413) 535-4045  
Fax: (413) 535-4379  
E-mail: [mcaley@iso-ne.com](mailto:mcaley@iso-ne.com)

**NEW ENGLAND POWER POOL  
PARTICIPANTS COMMITTEE**

José A. Rotger  
Vice Chair, NEPOOL Transmission Committee  
Director, Market Intelligence – New England  
c/o Customized Energy Solutions Ltd.  
25 Dyer Avenue  
Melrose, MA 02176  
Tel.: (781) 258-8662  
E-mail: [jrotger@ces-ltd.com](mailto:jrotger@ces-ltd.com)

Eric K. Runge, Esq.\*  
Counsel for NEPOOL  
Day Pitney LLP  
One Federal Street  
Boston, MA 02110  
Tel: (617) 345-4735  
Email: [ekrunge@daypitney.com](mailto:ekrunge@daypitney.com)

---

Hydro District); The City of Holyoke Gas and Electric Department; Green Mountain Power Corporation; Town of Hudson Light and Power Department; Massachusetts Municipal Wholesale Electric Company; Town of Middleborough Gas & Electric Department; New England Power Company d/b/a National Grid; New Hampshire Electric Cooperative, Inc.; New Hampshire Transmission, LLC; Eversource Energy Service Company on behalf of certain of its affiliates: The Connecticut Light and Power Company, NSTAR Electric Company, and Public Service Company of New Hampshire; Taunton Municipal Lighting Plant; Town of Norwood Municipal Light Department; Town of Reading Municipal Light Department; The United Illuminating Company; Unitil Energy Systems, Inc.; Fitchburg Gas and Electric Light Company; Vermont Electric Power Company; Vermont Electric Cooperative, Inc.; Vermont Transco, LLC; Vermont Public Power Supply Authority; Shrewsbury Electric and Cable Operations; Town of Wallingford, Connecticut Department of Public Utilities Electric Division; and Stowe Electric Department.

## PTO AC

Alan Trotta  
Chair, PTO Administrative Committee  
c/o AVANGRID Networks  
180 Marsh Hill Road  
Orange, CT 06477  
Tel.: (203) 499-3271  
E-mail: [alan.trotta@uinet.com](mailto:alan.trotta@uinet.com)

Mary E. Grover, Esq.\*  
Chair, PTO AC Legal Working Group  
c/o Eversource Energy  
247 Station Drive, SE100  
Westwood, MA 02090  
Tel: (781) 441-8696  
E-mail: [mary.grover@eversource.com](mailto:mary.grover@eversource.com)

\*Persons designated for service.<sup>6</sup>

## II. STANDARD OF REVIEW

The Tariff Revisions are submitted pursuant to Section 205 of the FPA, which “gives a utility the right to file rates and terms for services rendered with its assets.”<sup>7</sup> Under Section 205, the Commission “plays ‘an essentially passive and reactive’ role”<sup>8</sup> whereby it “can reject [a filing] only if it finds that the changes proposed by the public utility are not ‘just and reasonable.’”<sup>9</sup> The Commission limits this inquiry “into whether the rates proposed by a utility are reasonable – and [this inquiry does not] extend to determining whether a proposed rate schedule is more or less reasonable than alternative rate designs.”<sup>10</sup> The revisions filed herein “need not be the only reasonable methodology, or even the most accurate.”<sup>11</sup> As a result, even if an intervenor or the Commission develops an alternate proposal, the Commission must accept this Section 205 filing if it is just and reasonable.<sup>12</sup>

The Tariff Revisions proposed herein are being submitted under the “independent entity variation standard” of review established in Order No. 2003, and the Commission’s long-

---

<sup>6</sup> The Filing Parties respectfully request a waiver of Section 385.203(b)(3) of the Commission’s regulations to allow the inclusion of more than two persons on the service list in this proceeding.

<sup>7</sup> *Atlantic City Elec. Co. v. FERC*, 295 F.3d 1, 9 (D.C. Cir. 2002).

<sup>8</sup> *Id.* at 10 (quoting *City of Winnfield v. FERC*, 744 F.2d 871, 876 (D.C. Cir. 1984)).

<sup>9</sup> *Id.* at 9.

<sup>10</sup> *Cities of Bethany, Bushnell et al. v. FERC*, 727 F.2d 1131, 1136 (D.C. Cir.), *cert. denied*, 469 U.S. 917 (1984) (“*Cities of Bethany*”); *see also ISO New England Inc.*, 114 FERC ¶ 61,315 at P 33 and n.35 (2005) (citing *Pub. Serv. Co. of New Mexico v. FERC*, 832 F.2d 1201, 1211 (10th Cir. 1987) and *Cities of Bethany* at 1136.).

<sup>11</sup> *Oxy USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) (citing *Cities of Bethany* at 1136).

<sup>12</sup> *Cf. Southern California Edison Co., et al.*, 73 FERC ¶ 61,219 at 61,608 n.73 (1995) (“Having found the Plan to be just and reasonable, there is no need to consider in any detail the alternative plans proposed by the Joint Protesters.”) (citing *Cities of Bethany* at 1136.).

recognized “regional differences” standard.<sup>13</sup> In accordance with Order No. 2003, an ISO or an RTO proposing variations from the *pro forma* interconnection procedures and agreement established in that Final Rule must demonstrate that the variations are just and reasonable and not unduly discriminatory, and would accomplish the purposes of Order No. 2003 and any other applicable final interconnection rules.<sup>14</sup> To evaluate the variations sought by RTOs and ISOs, the Commission applies the “independent entity variation standard” of review.<sup>15</sup> This standard reflects the Commission’s recognition that “an RTO or ISO has different operating characteristics depending on its size and location and is less likely to act in an unduly discriminatory manner than a Transmission Provider that is a market participant.”<sup>16</sup> This standard also provides RTOs and ISOs greater flexibility to customize their interconnection procedures and agreements to the particular needs and market designs of the region.<sup>17</sup>

Similarly, the Commission has long recognized that ISOs and RTOs require flexibility to account for regional differences in their interconnection processes, and has adopted a “regional differences” standard to provide that flexibility.<sup>18</sup> As the Commission has stated, a generic

---

<sup>13</sup> *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs. ¶ 31,146 (2003), *order on reh’g*, Order No. 2003-A, FERC Stats. & Regs. ¶ 31,160, *order on reh’g*, Order No. 2003-B, FERC Stats. & Regs. ¶ 31,171 (2004), *order on reh’g*, Order No. 2003-C, FERC Stats. & Regs. ¶ 31,190 (2005), *aff’d sub nom. Nat’l Ass’n of Regulatory Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230, (Feb. 25, 2008). *See also Standardization of Small Generator Interconnection Agreements and Procedures*, Order No. 2006, FERC Stats. & Regs. ¶ 31,180, *order on reh’g*, Order No. 2006-A, FERC Stats. & Regs. ¶ 31,196 (2005), *order on clarification*, Order No. 2006-B, FERC Stats. & Regs. ¶ 31,221 (2006).

<sup>14</sup> *See* Order No. 2003 at PP 822-27. In Order No. 2006, the Commission also provided that an ISO/RTO may seek an “independent entity variation” from the final rule, which permits an ISO/RTO to adopt interconnection procedures that are responsive to specific regional needs. The Commission reviews variations proposed by an ISO/RTO “to ensure that they do not provide unwarranted opportunity for undue discrimination or produce an interconnection process that is unjust and unreasonable.” *See ISO New England Inc.*, 115 FERC ¶ 61,050 at P 12 (2006) (citing *PJM Interconnection, L.L.C.*, 108 FERC ¶ 61,025 at P 7 (2004); *Midwest Independent Transmission Sys. Operator, Inc.*, 114 FERC ¶ 61,270 at P 29 (2006)).

<sup>15</sup> *See* Order No. 2003 at P 827.

<sup>16</sup> *Id.* *See also Interconnection Queuing Practices*, 122 FERC ¶ 61,252 at P 13 (2008) (Because RTOs and ISOs do not own generation and thus do not have an incentive to unduly discriminate, variations sought by an RTO or ISO are reviewed under the “independent entity variation standard.”).

<sup>17</sup> *See* Order No. 2003 at P 147; *see id.* at PP 26 (allowing RTOs and ISOs “more flexibility to customize” interconnection procedures and agreements), 34 (affording RTOs and ISOs “more flexibility to propose different procedures and a different agreement”), 822 (providing “an RTO or ISO greater flexibility than that allowed under the regional differences rationale to propose variations from the Final Rule provisions”).

<sup>18</sup> *See, e.g., Small Generator Interconnection Agreements and Procedures*, Order No. 792, 145 FERC ¶ 61,159, at P 27 (2013), *order on reh’g*, Order No. 792-A, 146 FERC ¶ 61, 214 (2014); *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, at P 8, 104 FERC ¶ 61,103 (2003), *order on reh’g*, Order No. 2003-A, 106 FERC ¶ 61,220, *order on reh’g*, Order No. 2003-B, 109 FERC ¶ 61,287 (2004), *order on reh’g*, Order No. 2003-C, 111 FERC ¶ 61,401 (2005), *aff’d sub nom. Nat’l Ass’n of Regul. Util. Comm’rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007), *cert. denied*, 552 U.S. 1230 (2008).

rulemaking is not the appropriate venue to address regional concerns.<sup>19</sup> Rather, by making these proposed reforms pursuant to Section 205 of the FPA, the Commission can consider these just and reasonable reforms in light of the unique concerns facing the New England region and the challenges that individual DERs face in the interconnection process in the region.<sup>20</sup> Moreover, the Commission's policy is to respect filings that, like the instant filing, are the result of an involved stakeholder process to address regional issues, with high stakeholder support for the final package of reforms.<sup>21</sup>

### III. BACKGROUND

#### A. Current Process for Interconnection of New DERs

Pursuant to Schedules 22, 23, and 25 to the ISO-NE OATT (respectively, "Schedule 22," "Schedule 23," and "Schedule 25"), the ISO administers the interconnection of new Generating Facilities to the Administered Transmission System. Currently, the Administered Transmission System is defined in Schedules 22, 23, and 25 as "the PTF,<sup>22</sup> the Non-PTF,<sup>23</sup> and distribution facilities that are subject to the Tariff." If a distribution facility is subject to the ISO-NE Tariff, then a new DER may be required to interconnect through the ISO-NE interconnection process. The process to determine if a new DER must interconnect through the ISO-NE interconnection process is complex and consists of three steps.<sup>24</sup>

##### 1. Point of Interconnection

The first step to determine whether a new DER must interconnect through the ISO-NE interconnection process is to consider whether the line to which the DER seeks to interconnect is a Transmission Facility or a distribution facility. A line is a Transmission Facility if: (i) it is a PTF, *i.e.*

---

<sup>19</sup> *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890-A, 121 FERC ¶ 61,297, at P 863 (2007) ("a generic rulemaking is not the appropriate venue to address [regional] concerns"), *order on reh'g & clarification*, Order No. 890-B, 123 FERC ¶ 61,299 (2008), *order on reh'g & clarification*, Order No. 890-C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

<sup>20</sup> *See id.*

<sup>21</sup> *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 118 FERC ¶ 61,119, at P 561 ("[R]egional solutions that garner the support of stakeholders, including affected state authorities, are preferable."), *order on reh'g*, Order No. 890-A, 121 FERC ¶ 61,297 (2007), *order on reh'g & clarification*, Order No. 890-B, 123 FERC ¶ 61,229 (2008), *order on reh'g and clarification*, Order No. 890-C, 126 FERC ¶ 61,228, *order on clarification*, Order No. 890-D, 129 FERC ¶ 61,126 (2009).

<sup>22</sup> PTF stands for "Pool-Transmission Facilities." Under Section I.2.2 of the Tariff, PTF means the transmission facilities owned by PTOs which meet the criteria specified in Section II.49 of the OATT.

<sup>23</sup> Non-PTF stands for "Non-Pool Transmission Facilities."

<sup>24</sup> Graphic examples of the determination of which interconnection process applies to a new DER are included in the McBride Testimony at 6-8.

the line is 115 kV or above, or it is a grandfathered 69 kV line that meet the definition of PTF; or (ii) it is a Non-PTF transmission facility. On the other hand, a line is a distribution facility if it is a low-voltage electric power line (typically below 69 kV). Interconnections to the PTF or to Non-PTF transmission facilities will always proceed through the ISO interconnection process. Under the current rules, interconnections to distribution facilities are further reviewed to determine the appropriate interconnection process, as described in the next steps.<sup>25</sup>

## **2. Status of Line**

The second step to determine whether a new DER must interconnect through the ISO-NE interconnection process is to consider the status of the line to which the new DER seeks to interconnect. Specifically, if the line is determined to be a distribution facility under the first step, then the PTO must determine whether there is any wholesale activity on the line. For example, if an existing generator that is in commercial operation<sup>26</sup> is interconnected to the feeder, then the next step in the analysis is to determine whether that existing generator participates in the ISO's markets for the purpose of selling energy or capacity.<sup>27</sup> If the existing generator that is already interconnected to the feeder does participate in the ISO's markets for the purpose of selling energy or capacity, then, pursuant to the "first use" test, which implements the Commission's jurisdictional approach in Order Nos. 2003 and 2006 (as fully explained in Section V of this filing letter), the new DER has to interconnect to the feeder through the ISO-NE interconnection process (provided that no ISO-NE Tariff exemptions apply under step 3 below).<sup>28</sup>

## **3. Applicability of Any ISO-NE Tariff Exemptions**

The third step to determine whether a new DER must follow the ISO-NE interconnection process is to consider whether the new DER qualifies for any ISO-NE Tariff exemptions such that the ISO's interconnection process is not applicable. Specifically, a new DER is exempt from the ISO's interconnection process even if there is an existing generator that participates in the ISO's markets on the feeder to which the new DER is seeking to interconnect if: (i) the new DER is a retail customer interconnecting a new generating facility whose energy will only be consumed at a retail customer's site; (ii) the generating facility will not be used to make wholesale sales of electricity in interstate commerce (*i.e.*, the generating facility will be used to sell electricity through retail net metering or another state-procurement program); or (iii) the DER is a qualifying facility defined by the Public

---

<sup>25</sup> McBride Testimony at 4.

<sup>26</sup> Note that this existing generator may have interconnected through the applicable state interconnection process. DERs can interconnect through the applicable state interconnection process and then participate in the wholesale markets by meeting the relevant requirements such as metering.

<sup>27</sup> The New England states have established financing programs to incent the development of DERs. As part of these programs, the capacity rights vest in the electric distribution companies. As such, DERs may be required to enter into contracts with the electric distribution companies to obtain capacity rights. These contracts do not constitute wholesale transactions, as electrons do not flow pursuant to them.

<sup>28</sup> McBride Testimony at 4-5.

Utility Regulatory Policies Act (“PURPA”), where the facility’s owner intends to sell 100% of its output to its interconnected electric utility under a PURPA contract.<sup>29</sup> If one of these three exemptions applies, then the new DER interconnects pursuant to the relevant state’s interconnection process. Conversely, if none of these three exemptions apply, then the new DER must interconnect pursuant to the ISO’s interconnection process.<sup>30</sup>

## **B. The ISO’s Proposed Plan Application (“PPA”) Process**

In addition to the interconnection process (regardless of whether it is the ISO interconnection process or a state’s interconnection process), a new DER has to go through the ISO’s PPA process pursuant to Section I.3.9 of the ISO-NE Tariff.<sup>31</sup> As the RTO for New England, the ISO is responsible for reviewing and approving proposed system changes because these changes may impact the stability, reliability, or operating characteristics of the New England power system.<sup>32</sup> Accordingly, the purpose of the PPA process is to determine whether a new resource (including a new DER) could have an adverse impact on the reliability or operating characteristics of the ISO-administered system or any other affected system.<sup>33</sup>

The PPA process applies to new or increased generation that is equal to or greater than 5 MW<sup>34</sup> (these projects must include PPA forms in their submittals to the ISO made under Section I.3.9 of the ISO-NE Tariff), as well as new or increased generation greater than 1 MW but less than 5 MW, when the ISO has determined that such interconnection(s) will have a cumulative impact on the

---

<sup>29</sup> See Schedule 23, Section 1.1. See, also, definition of Interconnection Request in Schedule 22.

<sup>30</sup> McBride Testimony at 5-6.

<sup>31</sup> Resources that are equal to or less than 1 MW do not require the ISO’s review under Section I.3.9 of the Tariff.

<sup>32</sup> Under Section I.3.9 of the Tariff, each Market Participant and Transmission Owner shall submit to the ISO at least 60 days prior to the proposed in-service date (i) any new or materially changed plan for additions to or changes to any generating and demand resources or transmission facilities rated 69 kV or above subject to the control of the Market Participant or Transmission owner, and (ii) any new or materially changed plan for any other action to be taken by the Market Participant or Transmission Owner (except for retirements of or reductions in the capacity of a generating resource or demand resource) which may have a significant effect on the stability, reliability, or operating characteristics of the Transmission Owner’s transmission facilities, the transmission facilities of another Transmission Owner, or the System of a Market Participant.

<sup>33</sup> Pursuant to Section 3.03 of the TOA, a PTO or its distribution company affiliate must notify the ISO of situations where the interconnection of multiple generators to distribution facilities that are not OATT Interconnection Distribution Facilities may have cumulative impacts affecting the facilities used for the provision of regional transmission service and must, in such situations, consult with the ISO in its performance of such studies. The ISO will determine whether such interconnections will have a cumulative impact on facilities used for the provision of regional transmission service. In the case of non-OATT interconnections, the ISO’s review of cumulative impact is conducted as part of the process specified in Section I.3.9 of the ISO-NE Tariff.

<sup>34</sup> See ISO New England Planning Procedure No. 5-1, Procedures for Review of Market Participant’s or Transmission Owner’s Proposed Plans (Section I.3.9 Applications: Requirements, Procedures and Forms).



regional transmission system (these projects must submit generator notification forms, unless the ISO identifies that a PPA form is required). If a generator owner is not a Market Participant, then the PTO that is processing the interconnection must make the PPA submittal to the ISO on the generator's behalf. The submittal must be supported by a transmission study that meets the requirements of ISO-NE Planning Procedures to ensure there is no significant adverse effect upon the reliability or operating characteristics of the utility's transmission facilities, the transmission facilities of another utility, or the system of a Market Participant. The PTO is responsible for scoping and conducting this transmission study, in coordination with the ISO. Once the transmission study is complete, the PTO must present the study results and identification of any needed upgrades to the NEPOOL Reliability Committee for an advisory vote. After taking this vote into consideration, the ISO will issue a determination approving or denying the PPA.<sup>35</sup>

As Mr. McBride explains, the analyses required for the evaluation of a PPA for new or modified generation are contained in ISO New England Planning Procedure 5-6 – Interconnection Planning Procedure for Generation and Elective Transmission Upgrades (“PP 5-6”). It is important to note that the same evaluation standards are used for generation that is proceeding through the ISO interconnection queue and for generation that is seeking PPA approval having completed the state interconnection process. PP 5-6 describes the standards and conditions of the study, including the level of redispatch that is allowed in meeting the interconnection standard. All generation proposals, including DERs and accumulations of DERs, undergo similar scopes of analysis. Steady-state testing evaluates thermal, voltage, and short circuit testing impacts on the New England transmission system. Stability testing is performed to ensure that the system meets the stability requirements. In addition, the electromagnetic transient tool Power System Computer Aided Design (“PSCAD”) is used in the case of larger accumulations of inverter-based DERs, especially in the vicinity of other inverter-based equipment. The PSCAD testing ensures that the DERs will meet the New England ride-through requirements, that the system is stable without control interactions, and that there is not an unacceptable loss of source.<sup>36</sup>

#### **IV. PROBLEM STATEMENT AND DESCRIPTION OF THE FILING PARTIES' PROPOSAL**

As explained in Section III.A of this filing letter, under the current rules, some DERs interconnect through the ISO-NE interconnection process, and other DERs interconnect through the applicable state interconnection process. The application of two interconnection processes to the same

---

<sup>35</sup> Section I.3.9 of the Tariff provides that, unless the ISO notifies the Market Participant or Transmission Owner in writing within 60 days of the submittal (or 90 days if the ISO determines it requires additional time), that it has determined that implementation of the plan will have a significant adverse effect upon the reliability or operating characteristics of the Transmission Owner's transmission facilities, the transmission facilities of another Transmission Owner, or the system of a Market Participant, the Market Participant or Transmission Owner is free to proceed.

<sup>36</sup> McBride Testimony at 11-12. The McBride Testimony also contains additional details regarding the PPA process at 8-16.

electrical facilities results in multiple coordination problems and inefficiencies that in some cases result in adverse outcomes for DER developers.<sup>37</sup>

The ISO has no visibility into the distribution system. The PTOs are responsible for maintaining the models for the distribution system and studying distribution impacts, regardless of which interconnection process DERs follow. Hence, the PTOs are responsible for determining whether a new DER that is seeking to interconnect has to follow the ISO-NE interconnection process or the applicable state interconnection process. The mechanisms that PTOs use for this purpose differ, and the assumptions that underlie their determinations may also vary. In addition, the great number of DERs developed in the past five years has made it increasingly difficult for the PTOs to track the status of thousands of feeders throughout New England. That status is time-dependent and requires tracking the intent of each DER developer four years in the future to determine if an exemption to the ISO interconnection process applies. All these complexities have led to errors in feeder status determinations, with negative results for DER developers. Furthermore, applying the current exemptions to the application of the ISO interconnection process as well as additional exceptions under Order No. 2222 can lead to different outcomes with two interconnection processes applying at the same time on the same or neighboring feeders. The exemptions are also situation and time dependent (and can change), and so some DER developers are being forced to complete two interconnection processes (*i.e.*, they complete the state process first, and then the ISO process), with no reliability need to do so. Consequently, the application of two interconnection processes on the same feeders and across neighboring feeders has become prohibitively difficult in New England.<sup>38</sup>

To address these issues, the Filing Parties are proposing to modify Schedules 22, 23, and 25 to the OATT so that new DERs always proceed through the applicable state interconnection process.<sup>39</sup> Specifically, the Filing Parties propose to change the definition of Administered Transmission System in Schedules 22, 23, and 25 by deleting the words “and distribution facilities that are subject to the Tariff.” As a result, the new definition of Administered Transmission System will be limited to the “PTF, and the Non-PTF.”<sup>40</sup> This, in turn, will mean that the analysis that is currently conducted to determine if a DER has to go through the ISO interconnection process (described in Section III of this filing letter) will no longer be needed. Given this modification, other conforming changes are needed

---

<sup>37</sup> McBride Testimony at 17.

<sup>38</sup> McBride Testimony at 17-23.

<sup>39</sup> As explained in Section V of this filing letter, the Commission already established this same treatment for DER aggregations in Order No. 2222.

<sup>40</sup> The definition of Administered Transmission System is also being revised in Article 1 of the Large Generator Interconnection Agreement (“LGIA”) contained in Schedule 22, Attachment 1 to the Small Generator Interconnection Procedures (“SGIP”) contained in Schedule 23, Attachment 1 to the Small Generator Interconnection Agreement (“SGIA”) contained in Schedule 23, and Article 1 of the Electric Transmission Upgrade Interconnection Agreement (“ETUIA”) contained in Schedule 25.

in Schedules 23 and 22.<sup>41</sup> Specifically, language that is no longer needed (including exemptions to the ISO interconnection process) is being deleted in the following provisions:

- Schedule 23: definition of Interconnection Request; Section 1.1 – Applicability; Section 1.2 – Pre-Application; Section 1.3.2 – Acknowledgement of Interconnection Request; definition of Interconnection Request in Attachment 1
- Schedule 22: definition of Interconnection Request in the Large Generator Interconnection Procedures and the LGIA

In order to transition between the current approach, under which DERs interconnect either through the ISO interconnection process or the applicable state interconnection process, to the new approach, under which all DERs will interconnect through a state interconnection process, the ISO is adding language in new Sections 1.6.2 of Schedule 23 and 5.1.4 of Schedule 22. Under those new provisions, Interconnection Customers (i) with Interconnection Requests for distribution facilities that were subject to the ISO-NE Tariff prior to the effective date of the Tariff Revisions; (ii) that submitted the Interconnection Requests to the ISO prior to the effective date of the Tariff Revisions; and (iii) that have not completed the applicable state interconnection process must complete the ISO's interconnection process. Interconnection Customers (i) with Interconnection Requests for distribution facilities that were subject to the ISO-NE Tariff prior to the effective date of the Tariff Revisions; (ii) that had already completed the applicable state interconnection process; and (iii) subsequently submitted an Interconnection Request to the ISO prior to the effective date of the Tariff Revisions may either complete the ISO's interconnection process or withdraw the Interconnection Request submitted to the ISO.<sup>42</sup>

Importantly, the PPA process under Section I.3.9 of the Tariff is not changing and new DERs will continue to be subject to that process. As such, the ISO will continue to conduct the analyses described in Section III.B of this filing letter to determine if DERs could have an adverse impact on the reliability or operating characteristics of the ISO-administered system or any other affected system.<sup>43</sup>

## **V. THE PROPOSED TARIFF REVISIONS ACCOMPLISH THE GOALS OF ORDER Nos. 2003, 2006 AND 845, AND THEY ARE JUST AND REASONABLE**

As already mentioned, in Order No. 2222, the Commission declined to exercise its jurisdiction over the interconnections of DER aggregations, because doing so in that case is not necessary to advance the objectives of Order Nos. 2003, 2006, and 845. As fully explained below, the same is true in the case of the Filing Parties' proposed Tariff Revisions.

---

<sup>41</sup> McBride Testimony at 25-26.

<sup>42</sup> *Id.* at 26-27.

<sup>43</sup> *Id.* at 27-28.

In Order Nos. 2003 and 2006, the Commission adopted standard interconnection procedures and agreements that apply when an interconnection customer “that plans to engage in a sale for resale in interstate commerce or to transmit electric energy in interstate commerce”<sup>44</sup> requests interconnection to the facilities of a public utility’s Transmission System<sup>45</sup> or Distribution System<sup>46</sup> that, at the time that the interconnection is requested, are used to either transmit electric energy in interstate commerce or to sell electric energy at wholesale in interstate commerce pursuant to a Commission-filed OATT.<sup>47</sup> The Commission recognized that “some [lower voltage facilities] are used for jurisdictional service such as carrying power to a wholesale power customer for resale and are included in a public utility’s OATT,” and that “in some instances, there is a separate OATT rate for using them, sometimes called a Wholesale Distribution Rate.”<sup>48</sup> The Commission also noted that, with respect to a FERC-jurisdictional interconnection to a distribution facility, the cost of upgrades needed on the Distribution System to accommodate the interconnection must be directly assigned to the interconnection customer because an upgrade to the Distribution System generally does not benefit all transmission customers.<sup>49</sup> In Order 2003-C, the Commission concluded that, while it does not have the authority to directly regulate a “local distribution” facility that is used to transmit energy being sold at wholesale, “the Commission may regulate the entire transmission component (rates, terms and conditions) of the wholesale transaction.”<sup>50</sup>

Based on the Commission’s findings in Order Nos. 2003 and 2006, RTOs/ISOs, including ISO-NE, apply a “first use” test, under which the first interconnection to a distribution facility for the purpose of making wholesale sales is not subject to FERC jurisdiction because, at the time of the interconnection request, the distribution facility is not used to transmit electric energy in interstate commerce or subject to wholesale open access under an OATT. Accordingly, the first interconnecting resource that plans to engage in a sale for resale in interstate commerce or to transmit electric energy in interstate commerce on a distribution facility is not required to use the ISO’s interconnection

---

<sup>44</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 91 (citing Order No. 2003, 104 FERC ¶ 61,103 at P 804; Order No. 845, 163 FERC ¶ 61,043).

<sup>45</sup> The Commission defined “Transmission System” as “[t]he facilities owned, controlled or operated by the Transmission Provider or the Transmission Owner that are used to provide transmission service under the Tariff.” *Id.* (citing Order No. 2006, 111 FERC ¶ 61,220 at P 6).

<sup>46</sup> The Commission defined “Distribution System” as “[t]he Transmission Provider’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.” *Id.* (citing Order No. 2006, 111 FERC ¶ 61,220 at P 7).

<sup>47</sup> *Id.* (citing Order No. 2003, 104 FERC ¶ 61,103 at P 804; Order No. 2006, 111 FERC ¶ 61,220 at P 5; see also Order No. 845, 163 FERC ¶ 61,043).

<sup>48</sup> *Id.* (citing Order No. 2003, 104 FERC ¶ 61,103 at P 803; Order No. 845, 163 FERC ¶ 61,043).

<sup>49</sup> *Id.* (citing Order No. 2003, 104 FERC ¶ 61,103 at P 697; Order No. 845, 163 FERC ¶ 61,043).

<sup>50</sup> *Id.* (citing Order No. 2003-C, 111 FERC ¶ 61,401 at P 53; Order No. 845, 163 FERC ¶ 61,043).

procedures. Rather, that resource can interconnect through the state process. However, as described in steps 2 and 3 of the interconnection analysis included in Section III.A of this filing letter, under the “first use” test (provided that no exemptions apply), subsequent interconnections of resources to the same distribution facility for the purpose of engaging in wholesale sales or transmission in interstate commerce are subject to Commission jurisdiction because the distribution facilities are already being used to facilitate wholesale transactions and therefore are subject to the ISO-NE OATT. Accordingly, such resources must interconnect through the ISO-NE interconnection process.

In Order No. 2222, the Commission explained that, when it issued Order Nos. 2003 and 2006, it anticipated that the standard interconnection procedures and agreement terms would rarely apply to distributed generation.<sup>51</sup> Thus, the Commission agreed that the integration of DER aggregations into the RTO/ISO markets warranted it addressing the application of its interconnection policy to DER aggregations. The Commission then explained that, as it had recognized in Order No. 792, renewable portfolio standards, state policies promoting distributed generation, and decreases in capital costs have driven a substantial increase in small generator interconnection requests<sup>52</sup> and, “in the intervening years, those trends have only intensified, further stimulating [DER] development.”<sup>53</sup>

The Commission stated that it anticipates that increased participation of DER in RTO/ISO markets via DER aggregations will substantially increase the number of DER interconnections to distribution facilities for the purpose of engaging in wholesale transactions and/or transmission in interstate commerce, and recognized that such growth could increase the number of distribution-level interconnections subject to the Commission’s jurisdiction.<sup>54</sup> The Commission also agreed that a large influx of distribution-level interconnections could create uncertainty as to whether certain interconnections are subject to Commission jurisdiction or state jurisdiction, and whether they would require the use of the Commission’s standard interconnection procedures and agreement.<sup>55</sup> Moreover, the Commission acknowledged that this could additionally burden RTOs/ISOs with an overwhelming volume of interconnection requests.<sup>56</sup> Given these concerns, notwithstanding the principles of Order Nos. 2003 and 2006, in Order No. 2222, the Commission explicitly declined to exercise its jurisdiction over the interconnections of DERs to distribution facilities for the purpose of participating

---

<sup>51</sup> In Order No. 2003-A FERC recognized that Order No. 20003 “does not apply to most distributed generation, since these facilities almost always interconnect to facilities that are not subject to an OATT.” *Id.* (citing Order No. 2003-A, 106 FERC ¶ 61,220 at P 739).

<sup>52</sup> *Id.* at P 95 (citing Small Generator Interconnection Agreements & Procedures, Order No. 792, 145 FERC ¶ 61,159, at P 23 (2013), as modified, errata notice, 146 FERC ¶ 61,019, as modified, errata notice, 148 FERC ¶ 61,215, clarified, Order No. 792-A, 146 FERC ¶ 61,214 (2014)).

<sup>53</sup> *Id.* at P 95.

<sup>54</sup> *Id.*

<sup>55</sup> Order No. 2222, 172 FERC ¶ 61,247 at P 95.

<sup>56</sup> *Id.*

in RTO/ISO markets exclusively as part of a DER aggregation.<sup>57</sup> FERC explained that it does not believe that requiring standard interconnection procedures and agreement terms for these interconnections is necessary to advance the objectives of Order Nos. 2003, 2006, and 845, which established standard interconnection procedures and agreements in order to prevent undue discrimination, preserve reliability, increase energy supply, lower wholesale prices for customers by increasing the number and types of new generation that would compete in the wholesale electricity market, reduce interconnection time and costs, and facilitate development of non-polluting alternative energy sources.<sup>58</sup> Hence, the Commission agreed that state and local authorities, which have traditionally regulated DER interconnections, have the requisite experience, interest, and capacity to oversee these distribution-level interconnections.<sup>59</sup>

The Commission further explained that, because it declined to exercise its jurisdiction over the interconnection of a DER to a distribution facility for the purposes of participating in RTO/ISO markets exclusively through a DER aggregation, the interconnection of such a resource for the purpose of participating in a DER aggregation would not constitute a first interconnection for the purpose of making wholesale sales under the “first use” test.<sup>60</sup> Only a DER requesting interconnection to the distribution facility for the purpose of directly engaging in wholesale transactions (*i.e.*, not through a DER aggregation) would create a “first use” and any subsequent distributed energy resource interconnecting for the purpose of directly engaging in wholesale transactions would be considered a Commission-jurisdictional interconnection.<sup>61</sup> Thus, in Order No. 2222, the Commission held that the standard interconnection procedures and agreement terms originally established in Order Nos. 2003 and 2006, and later amended by Order No. 845, continue to apply to the interconnections of DERs that participate in RTO/ISO markets individually, independent of a DER aggregation.<sup>62</sup>

In New England, however, the concerns that the Commission cited in support of its decision not to exercise its jurisdiction over DER aggregations also exist for individual DERs. When the Commission issued Order Nos. 2003 and 2006, it anticipated that the standard interconnection procedures and agreement terms would rarely be applied to distributed generation. That has not been the case in New England, where renewable portfolio standards and state policies promoting distributed generation have resulted in an exponential growth of DERs, which in turn has greatly increased the number of small generator interconnection requests that ISO-NE has had to process over the past five

---

<sup>57</sup> *Id.* at P 96.

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

<sup>60</sup> *Id.* at P 97.

<sup>61</sup> *Id.*

<sup>62</sup> *Id.* at P 98.

years.<sup>63</sup> Hence, while the Commission anticipates that DER aggregations will significantly increase the number of DER interconnections to distribution facilities for the purpose of engaging in wholesale transactions, thereby increasing the number of distribution-level interconnections subject to the Commission's jurisdiction, that significant increase has already taken place in New England because of the great number of new individual DER projects seeking to interconnect as well as modifications to existing DERs (in the form of increased capacity/other physical changes, or a decision to participate in the ISO's markets after the DER is already in service), which also trigger the ISO's interconnection process. As such, ISO-NE does anticipate becoming burdened with an overwhelming volume of interconnection requests.<sup>64</sup>

Notably, the large influx of distribution-level interconnections has already created uncertainty in New England as to whether certain interconnections are subject to Commission jurisdiction or state jurisdiction, and whether they would require the use of the ISO-NE interconnection process. For instance, as mentioned in the problem statement, the PTOs are responsible for making the determination of whether a new DER is subject to the ISO-NE interconnection process. The mechanisms that PTOs use for this purpose differ and the assumptions that underlie their determinations may also vary. In addition, due to the recent high volumes of DER interconnections, tracking the time-dependent status of thousands of feeders (including the energy market status and the intent of DER developers to determine if any exemptions to the ISO interconnection process apply) throughout New England is extremely challenging and time consuming for the PTOs. This enormous amount of work has led to several errors in feeder status determinations that result in adverse outcomes for DER sponsors, who view the current approach for interconnection under two processes as a barrier for DER development.<sup>65</sup>

In addition, as also described in the problem statement, the exemptions to the application of the ISO interconnection process, as well as additional exceptions that will be applied pursuant to the modifications made to the Tariff under Order No. 2222, add to the complexity of the current approach and can lead to different outcomes with two interconnection processes applying at the same time on the same feeders. As such, coordination of more than one process on the same feeders and across neighboring feeders is expected to become prohibitively difficult in New England. Moreover, because exemptions are situation and time dependent (and can change), some developers are being forced to complete two interconnection processes (*i.e.*, they complete the state process first, and then the ISO process), with no reliability need or benefit. Applying only the state interconnection process to all DERs (whether individually or as part of a DER aggregation) will remove the uncertainty regarding whether DER interconnections are subject to Commission jurisdiction or state jurisdiction and will eliminate the coordination problems and inefficiencies that exist today and will worsen in the future.<sup>66</sup>

---

<sup>63</sup> McBride Testimony at 23-24.

<sup>64</sup> *Id.* at 24.

<sup>65</sup> McBride Testimony at 28-29.

<sup>66</sup> *Id.*

Importantly, because new DERs will continue to be subject to the ISO's PPA process, the objective in Order Nos. 2003, 2006, and 845 to preserve reliability will continue to be met under the Filing Parties' proposal to have all new DERs interconnect through a state process<sup>67</sup>. In addition, because using only the state interconnection process not only for DER aggregations but also for individual DERs provides DER developers with flexibility and removes what they have identified as a barrier to DER development, the Filing Parties' proposal also advances the other objectives of Order Nos. 2003, 2006, and 845, *i.e.*, preventing undue discrimination, increasing energy supply, lowering wholesale prices for customers by increasing the number and types of new generation that would compete in the wholesale electricity market, reducing interconnection time and costs, and facilitating development of non-polluting alternative energy sources<sup>68</sup>. Furthermore, the Filing Parties believe that, as the Commission stated with respect to DER aggregations in Order No. 2222, state and local authorities have the requisite experience, interest, and capacity to oversee the interconnection of individual DERs. Consequently, the Commission's justifications for allowing DER aggregations to go through the applicable state interconnection process also support allowing individual DERs to always go through the applicable state interconnection process. The Filing Parties' proposal to extend the same treatment that the Commission has already established for DER aggregations<sup>69</sup> to individual DERs is therefore just and reasonable, and not unduly discriminatory.<sup>70</sup>

Finally, the Filing Parties' proposal is consistent with the Commission's stated goals in its recent Notice of Proposed Rulemaking outlining improvements to generator interconnection procedures.<sup>71</sup> As outlined above, the proposed changes will streamline the interconnection process, eliminate redundancies, and reduce processing inefficiencies that frequently lead to delays in administration of the ISO interconnection queue.<sup>72</sup>

---

<sup>67</sup> McBride Testimony at 30.

<sup>68</sup> *Id.*

<sup>69</sup> Like DER aggregations, under the Filing Parties' proposal, individual DERs will not be subject to the standard interconnection procedures and agreement terms. Accordingly, under the proposal, DER interconnection agreements executed in a state process would not be submitted to the Commission.

<sup>70</sup> As explained in Section II of this filing letter, the proposed Tariff Revisions are being submitted under the "regional differences" standard, and the Commission has recognized that a generic rulemaking is not the appropriate venue to address regional concerns. Rather, by making these proposed reforms pursuant to Section 205 of the FPA, the Commission can consider these just and reasonable reforms in light of the unique concerns facing the New England region and the challenges that individual DERs face in the interconnection process in the region. *See* note 20, *supra*.

<sup>71</sup> *Improvements to Generator Interconnection Procedures and Agreements*, Notice of Proposed Rulemaking, 179 FERC ¶ 61,194 (2022).

<sup>72</sup> *Id.* at P 23 (identifying areas of concern in generator interconnection procedures).



## **VI. ADDITIONAL TARIFF REVISIONS TO ESTABLISH THE ORDER IN WHICH INTERCONNECTION REQUESTS ARE INCLUDED IN THE CNR GROUP STUDY**

In early 2009, the LGIP and SGIP were revised to provide Interconnection Customers the option of two levels of interconnection service reflecting the Interconnection Customer's market participation: (1) CNR Interconnection Service (for Interconnection Customers that seek to interconnect their generating facilities as capacity resources); and (2) Network Resource Interconnection Service (for Interconnection Customers that do not seek to interconnect their generating facilities as capacity resources).<sup>73</sup> Under the CNR Interconnection Service option, Interconnection Customers can interconnect their facilities under the Capacity Capability ("CC") Interconnection Standard up to the generating facility's CNR Capability based on the generating facility's Capacity Supply Obligation acquired in the Forward Capacity Market ("FCM").<sup>74</sup> The CC Interconnection Standard includes the interconnection requirements under the Minimum Interconnection Standard ("MIS"), as well as the FCM's overlapping interconnection impacts test to assure the deliverability of generating facilities' output. The MIS component ensures that the interconnection of the proposed new generating facility does not create an adverse effect on the ISO's ability to reliably operate and maintain the New England Transmission System.<sup>75</sup> The overlapping interconnection impacts analysis component determines whether the proposed new generating facility can provide incremental capacity to the system (*i.e.*, it can operate without redispatch of other capacity resources).<sup>76</sup> The CNR Group Study refers to the analysis performed during the FCM qualification process, in accordance with Section III.13.1.1.2.3 of the Tariff, to determine the interconnection requirements, including the overlapping interconnection impacts analysis. Specifically, pursuant to Section III.13.1.1.2.3 of the Tariff, for each New Generating Capacity Resource seeking to participate in the FCM, the ISO conducts an initial interconnection analysis in the form of a group study. Participation in a CNR Group Study is a prerequisite to achieve CNR Interconnection Service and CNI Interconnection Service.<sup>77</sup>

---

<sup>73</sup> Joint Filing of Proposed Revisions to the Generator Interconnection Process and Forward Capacity Market Participation Provisions Set Forth in the ISO New England Inc. Transmission, Markets and Services Tariff, *ISO New England Inc.*, Docket Nos., ER04-432-006, ER04-433-006, ER07-546-013, ER07-547-003, (Oct. 31, 2008) at 26-27, accepted in *ISO New England Inc.*, 126 FERC ¶ 61,080 (2009).

<sup>74</sup> *Id.* at 27.

<sup>75</sup> *Id.* at 28.

<sup>76</sup> *Id.*

<sup>77</sup> Capacity Network Import Interconnection Service ("CNI Interconnection Service") is defined in Schedule 25 to mean, for an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer's Capacity Network Import Interconnection Service is for the megawatt of Capacity Network Import Capability. Capacity Network Import Interconnection Service does not in and of itself convey transmission service.

The order for Interconnection Requests to be included in the CNR Group Study is established in Section 4.1.1 of Schedule 22, Section 1.5.2 of Schedule 23, and Schedule 4.1.1 of Schedule 25. Presently, those provisions specify the order of inclusion for Interconnection Requests submitted in the ISO-NE interconnection process, but do not specify when interconnection requests submitted in the state processes are to be included in the CNR Group Study. Those details are needed to determine the order of testing for deliverability and the identification of upgrades (if needed).<sup>78</sup>

To improve the CNR Group Study, in the present filing, the Filing Parties propose to add language in Section 4.1.1 of Schedule 22, Section 1.5.2 of Schedule 23, and Schedule 4.1.1 of Schedule 25 to establish the order in which interconnection requests submitted in the state process will be included in the CNR Group Studies. First, the ISO will include all Interconnection Requests submitted in the ISO-NE interconnection process *and* all interconnection requests submitted in the state processes that have received Tariff Section I.3.9 approval from the ISO. These interconnection requests will be included in order of submission (for the Interconnection Requests submitted in the ISO-NE interconnection process) or PPA approval (for the interconnection requests submitted in the state processes). After all those interconnection requests are included in the CNR Group Study, the ISO will include interconnection requests submitted in the state interconnection processes that do not have an ISO-approved PPA at the time when the CNR Group Study commences. These interconnection requests will be included in order of submission to the Interconnecting Transmission Owners or their distribution affiliates.<sup>79</sup>

## **VII. ADDITIONAL TARIFF REVISIONS TO INCLUDE GENERATION PROJECTS THAT ARE NOT PARTICIPATING IN THE ISO'S INTERCONNECTION PROCESS, IF THEY MEET CERTAIN CONDITIONS, IN THE BASE CASE DATA**

The ISO coordinates interconnection studies pursuant to the Base Case Data provisions in Schedules 22 and 25. While there is no similar provision in Schedule 23, the Schedule 22 provision applies by reference pursuant to Order No. 2006.<sup>80</sup> Specifically, under Section 2.3 of Schedule 22, the ISO is required to maintain Base Case power flow, short circuit, and stability databases, including all underlying assumptions, and contingency lists on a secured location on its website. The Base Cases must include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the ISO's sole judgement, may have an impact on the Interconnection Request. In practice, in the Base Case for an Interconnection Request submitted in the ISO-NE interconnection process, projects that are not in the ISO interconnection queue are not included until they have PPA approval from the ISO. Projects that do not have PPA approval have to respect new projects in the ISO interconnection queue once their

---

<sup>78</sup> While ISO New England Planning Procedure No. 10 has included some detail on the order for inclusion of interconnection requests in the CNR Study, it is now appropriate to formalize the proposed approach in the Tariff to improve the coordination of interconnection studies.

<sup>79</sup> McBride Testimony at 33.

<sup>80</sup> See Order No. 2006 at P 59.

studies commence and their Base Cases are established. This creates some uncertainty when a project that is going through the state interconnection queue is approaching the completion of the interconnection studies.

To address this issue and improve the coordination of interconnection studies, the Filing Parties propose to add language in the Base Case Data provisions (Section 2.3 of Schedule 22, and Section 2.3 of Schedule 25) to specify that the Base Cases must also include generation projects that are not participating in the ISO's interconnection process, but are expected to achieve PPA approval within 90 days from the date of the creation of the Base Cases and for which steady state, short circuit and stability models for the generation projects and any associated system upgrades have been provided to the ISO.<sup>81</sup>

## **VIII. STAKEHOLDER PROCESS**

The Tariff Revisions were considered and supported in the NEPOOL stakeholder process. At its May 31, 2022 meeting, the Transmission Committee voted unanimously in favor of recommending the Participants Committee's support for the revisions, with two abstentions. The Participants Committee, at its June 21-23, 2022 meeting, supported the Tariff Revisions as part of its Consent Agenda.<sup>82</sup> The PTO AC voted unanimously to support the Tariff Revisions at its June 9, 2022 meeting.<sup>83</sup>

## **IX. REQUESTED EFFECTIVE DATE**

The Filing Parties respectfully request that the Tariff Revisions become effective on August 28, 2022, 60 days after the date of this filing.

## **X. ADDITIONAL SUPPORTING INFORMATION**

Section 35.13 of the Commission's regulations generally requires public utilities to file certain cost and other information related to an examination of traditional cost-of-service rates.<sup>84</sup> However, the Study Revisions filed herein are not traditional "rates." Further, ISO-NE is not a traditional investor-owned utility. Therefore, to the extent necessary, the Filing Parties request waiver of Section

---

<sup>81</sup> McBride Testimony at 35-36.

<sup>82</sup> The Consent Agenda for a Participants Committee meeting, similar to the Consent Agenda for a Commission open meeting, is a group of actions (each recommended by a Technical Committee or subgroup established by the Participants Committee) to be taken by the Participants Committee through approval of a single motion at a meeting. All recommendations voted on as part of the Consent Agenda are deemed to have been voted on individually and independently. In this case, the Participants Committee's approval of the June 21-23, 2022 Consent Agenda included its support for the Tariff Revisions filed herein.

<sup>83</sup> As described in Section II of this filing letter, the Commission's policy is to respect filings that, like the instant filing, are the result of an involved stakeholder process to address regional issues, with high stakeholder support for the final package of reforms. *See* note 21, *supra*.

<sup>84</sup> 18 C.F.R. § 35.13 (2014).

35.13 of the Commission's regulations. Notwithstanding their request for waiver, the Filing Parties submit the additional information enumerated below in substantial compliance with relevant provisions of Section 35.13.

35.13(b)(1) – Materials included herewith are as follows:

- ♦ This transmittal letter;
- ♦ Testimony of Alan McBride in support of the Tariff Revisions;
- ♦ Marked Tariff sections reflecting the revisions effected by this filing;
- ♦ Clean Tariff sections incorporating the revisions effected by this filing; and,
- ♦ List of governors, utility regulatory agencies in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont, and others to whom a copy of this filing has been e-mailed.

35.13(b)(2) – As noted above, the Filing Parties request that the Tariff Revisions become effective on August 28, 2022.

35.13(b)(3) - Pursuant to Section 17.11(e) of the Participants Agreement, Governance Participants are being served electronically rather than by paper copy. The names and addresses of the Governance Participants are posted on the ISO-NE website at <https://www.iso-ne.com/participate/participant-asset-listings/>. A copy of this transmittal letter and the accompanying materials have also been sent electronically to the governors and electric utility regulatory agencies for the six New England states that comprise the New England Control Area, to the New England Conference of Public Utility Commissioners, and to the Executive Director of the New England States Committee on Electricity. In accordance with Commission rules and practice, there is no need for the Governance Participants or the other entities described above to be included on the Commission's official service list in the captioned proceeding unless such entities become intervenors in this proceeding.

35.13(b)(4) - A description of the materials submitted in this filing is contained in Section X of this transmittal letter.

35.13(b)(5) - The reasons for this filing are discussed in Sections IV, V, VI, and VII of this transmittal letter.

35.13(b)(6) - ISO-NE's approval of these revisions is evidenced by this filing. These revisions reflect the results of the Participant Processes required by the Participants Agreement and reflect the support of the Participants Committee.

35.13(b)(7) - The Filing Parties have no knowledge of any relevant expenses or costs of service that have been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.

## **XI. CONCLUSION**

For the foregoing reasons, the Filing Parties respectfully request that the Commission accept the Tariff Revisions as proposed herein, without modifications or conditions, to become effective on August 28, 2022.

Respectfully submitted,

By: /s/ Margo Caley  
Margo Caley, Esq.  
Senior Regulatory Counsel  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841  
(413) 535-4045

Counsel for ISO New England Inc.

By: /s/ Eric K. Runge  
Eric K. Runge, Esq.  
Day Pitney LLP  
One Federal Street  
Boston, MA 02110  
(617) 345-4735

Counsel for New England Power Pool Participants  
Committee

By: /s/ Mary E. Grover  
Mary E. Grover, Esq.  
Chair, PTO AC Legal Working Group Chair  
c/o Eversource Energy  
247 Station Drive, SE100  
Westwood, MA 02090  
(781) 441-8696

Counsel for PTO Administrative Committee

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**ISO New England Inc.**

)      **Docket No. ER22-\_\_-000**

**TESTIMONY OF ALAN MCBRIDE**

1    **Q:    PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**

2    A:    My name is Alan McBride. I am Director of Transmission Services and Resource  
3           Qualification with ISO New England Inc. (the “ISO”). My business address is  
4           One Sullivan Road, Holyoke, Massachusetts 01040.

5

6    **Q:    PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND**  
7           **WORK EXPERIENCE.**

8    A:    I joined the ISO in June 2006 and, for the following four years, my primary  
9           responsibility was as Project Manager of New Generation Qualification for the  
10          Forward Capacity Market.<sup>1</sup> In 2010, I became the Manager, Area Transmission  
11          Planning for northern New England, and continued in that position until 2015,  
12          when I became Director of Transmission Services. In that position, I have been  
13          responsible for the oversight of the ISO’s interconnection process for new  
14          Generating Facilities and Elective Transmission Upgrades. In November 2019,  
15          my responsibilities were expanded to include the qualification of resources in the  
16          Forward Capacity Market (“FCM”). Accordingly, my current title is Director of  
17          Transmission Services and Resource Qualification.

---

<sup>1</sup> Capitalized terms used but not defined in this testimony are intended to have the meaning given to such terms in the ISO New England Inc. Transmission, Markets and Services Tariff.

1 Before joining the ISO, I worked at Dynegy Inc. and then at Calpine Corporation.  
2 At both companies, I supported various transmission-related activities associated  
3 with the development, interconnection, and commercial operation of merchant  
4 generation facilities. Prior to joining Dynegy, I worked at Power Technologies  
5 Incorporated (now a division of Siemens Industries), where I conducted various  
6 transmission analysis studies, including the system impact studies of several  
7 proposed generating facilities.

8  
9 I have 27 years of experience in various aspects of power transmission system  
10 analysis and transmission services. I hold a B.S. degree in Electrical Engineering  
11 from University College Dublin, in Ireland, a Master's degree in Electric Power  
12 Engineering from Rensselaer Polytechnic Institute, and an M.B.A. degree from  
13 Purdue University.

14

15 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

16 A: The purpose of my testimony is to explain Tariff Revisions that modify the  
17 process for interconnection of new distributed energy resources ("DERs") and  
18 improve interconnection studies.

19

20 **Q: HOW IS YOUR TESTIMONY ORGANIZED?**

21 A: Section I of my testimony provides background information regarding the  
22 processes that currently apply to new DERs. In Section II of my testimony, I  
23 explain the problems with the current approach under which some new DERs

1 interconnect through the ISO-NE interconnection process, while other new DERs  
2 interconnect through the applicable state process. In Section III, I describe how  
3 the proposed Tariff Revisions address these problems, and how the proposed  
4 Tariff Revisions meet the goals of Order Nos. 2003 and 2006. Finally, in  
5 Sections IV and V of my testimony I describe the Tariff Revisions related to the  
6 improvement of interconnection studies.

7  
8 **I. BACKGROUND**

9  
10 **Q: PLEASE BRIEFLY EXPLAIN WHY, UNDER THE CURRENT**  
11 **CONSTRUCT, A NEW DER MAY BE REQUIRED TO INTERCONNECT**  
12 **THROUGH THE ISO-NE INTERCONNECTION PROCESS.**

13 **A:** Pursuant to Schedules 22, 23, and 25 to the ISO-NE OATT (respectively,  
14 “Schedule 22,” “Schedule 23,” and “Schedule 25”), the ISO administers the  
15 interconnection of new Generating Facilities to the Administered Transmission  
16 System. Currently, the Administered Transmission System is defined in  
17 Schedules 22, 23, and 25 as “the PTF,<sup>2</sup> the Non-PTF,<sup>3</sup> and distribution facilities  
18 that are subject to the Tariff.” If a distribution facility is subject to the ISO-NE  
19 Tariff, then a new DER may be required to interconnect through the ISO-NE  
20 interconnection process. The process to determine if a new DER must  
21 interconnect through the ISO-NE interconnection process consists of three steps.

---

<sup>2</sup> PTF stands for “Pool-Transmission Facilities.” Under Section I.2.2 of the Tariff, PTF means the transmission facilities owned by PTOs which meet the criteria specified in Section II.49 of the OATT.

<sup>3</sup> Non-PTF stands for “Non-Pool Transmission Facilities.”



1   **Q:     PLEASE DESCRIBE THE FIRST STEP TO DETERMINE WHETHER A**  
2       **NEW DER MUST INTERCONNECT THROUGH THE ISO-NE**  
3       **INTERCONNECTION PROCESS.**

4   **A:**   The first step to determine whether a new DER must interconnect through the  
5       ISO-NE interconnection process is to consider whether the line to which the DER  
6       seeks to interconnect is a Transmission Facility or a distribution facility. A line is  
7       a Transmission Facility if: (i) it is a PTF, *i.e.* the line is 115 kV or above, or it is a  
8       grandfathered 69 kV line that meet the definition of PTF; or (ii) it is a Non-PTF  
9       transmission facility. PTF is well defined in the OATT and has been in use in  
10      New England for many years. Generally, the PTF refers to the “networked”  
11      portion of the transmission system. Most of the lines that are 115 kV and above  
12      in New England are PTF. The Non-PTF generally refers to radial transmission  
13      facilities. On the other hand, a line is a distribution facility if it is a low-voltage  
14      electric power line (typically below 69 kV). Interconnections to the PTF or to  
15      Non-PTF transmission facilities will always proceed through the ISO  
16      interconnection process. Under the current rules, interconnections to distribution  
17      facilities are further reviewed to determine the appropriate interconnection  
18      process, as described in the next steps.

19  
20   **Q:     PLEASE DESCRIBE THE SECOND STEP TO DETERMINE WHETHER**  
21       **A NEW DER MUST INTERCONNECT THROUGH THE ISO-NE**  
22       **INTERCONNECTION PROCESS.**

1   **A:**     The second step to determine whether a new DER must interconnect through the  
2           ISO-NE interconnection process is to consider the status of the line to which the  
3           new DER seeks to interconnect. Specifically, if the line is determined to be a  
4           distribution facility under the first step, then the Participating Transmission  
5           Owner (“PTO”) must determine whether there is any wholesale activity on the  
6           line. For example, if an existing generator that is in commercial operation<sup>4</sup> is  
7           interconnected to the feeder, then the next step in the analysis is to determine  
8           whether that existing generator participates in the ISO’s markets for the purpose  
9           of selling energy or capacity.<sup>5</sup> If the existing generator that is already  
10          interconnected to the feeder does participate in the ISO’s markets for the purpose  
11          of selling energy or capacity, then, pursuant to the “first use” test, which  
12          implements the Commission’s jurisdictional approach in Order Nos. 2003 and  
13          2006, the new DER has to interconnect to the feeder through the ISO-NE  
14          interconnection process (provided that no ISO-NE Tariff exemptions apply under  
15          step 3, which I explain below).

16  
17   **Q:**     **PLEASE DESCRIBE THE THIRD STEP TO DETERMINE WHETHER A**  
18           **NEW DER MUST INTERCONNECT THROUGH THE ISO-NE**  
19           **INTERCONNECTION PROCESS.**

---

<sup>4</sup> Note that this existing generator may have interconnected through the applicable state interconnection process. DERs can interconnect through the applicable state interconnection process and then participate in the wholesale markets (without completing any further interconnection activity) by meeting the relevant market participation requirements such as metering.

<sup>5</sup> The New England states have established financing programs to incent the development of DERs. As part of these programs, the capacity rights vest in the electric distribution companies. As such, DERs may be required to enter into contracts with the electric distribution companies to obtain capacity rights. These contracts do not constitute wholesale transactions, as electrons do not flow pursuant to them.

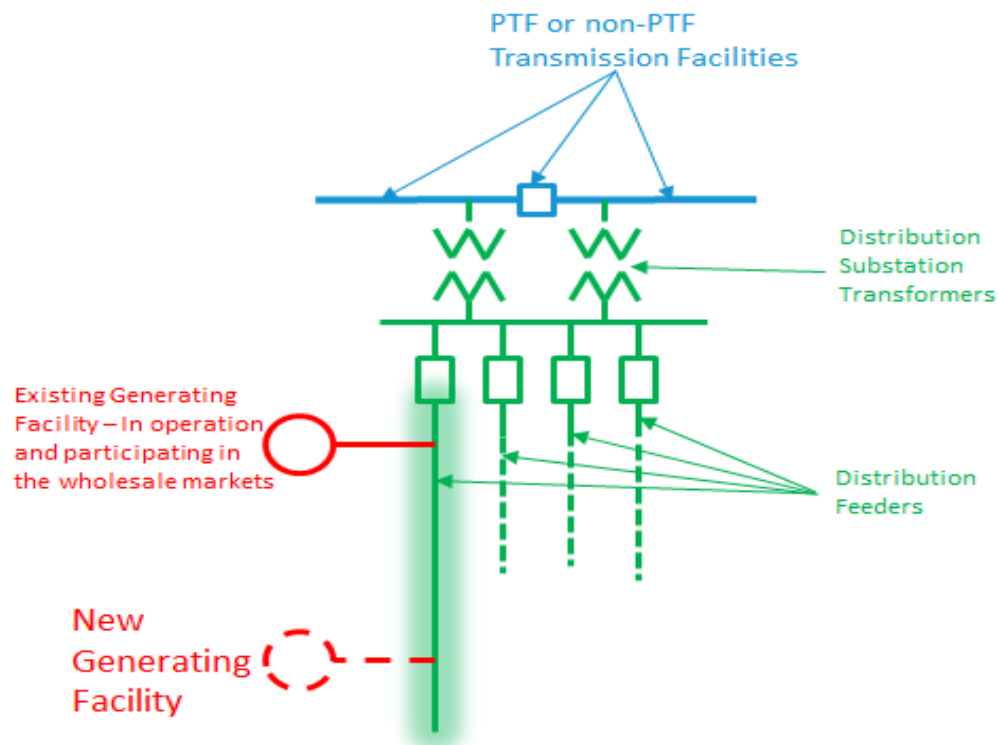
1    **A:**     The third step to determine whether a new DER must follow the ISO-NE  
2           interconnection process is to consider whether the new DER qualifies for any  
3           ISO-NE Tariff exemptions such that the ISO’s interconnection process is not  
4           applicable. Specifically, a new DER is exempt from the ISO’s interconnection  
5           process even if there is an existing generator that participates in the ISO’s markets  
6           on the feeder to which the new DER is seeking to interconnect if: (i) the new DER  
7           is a retail customer interconnecting a new generating facility whose energy will  
8           only be consumed at a retail customer’s site; (ii) the generating facility will not be  
9           used to make wholesale sales of electricity in interstate commerce (*i.e.*, the  
10          generating facility will be used to sell electricity through retail net metering or  
11          another state-procurement program); or (iii) the DER is a qualifying facility  
12          defined by the Public Utility Regulatory Policies Act (“PURPA”), where the  
13          facility’s owner intends to sell 100% of its output to its interconnected electric  
14          utility under a PURPA contract.<sup>6</sup> If one of these three exemptions applies, then  
15          the new DER interconnects pursuant to the relevant state’s interconnection  
16          process. Conversely, if none of these three exemptions apply, then the new DER  
17          must interconnect pursuant to the ISO’s interconnection process.

18  
19    **Q:**     **PLEASE PROVIDE GRAPHIC EXAMPLES OF DETERMINATIONS OF**  
20            **WHETHER A NEW DER IS REQUIRED TO GO THROUGH THE ISO-**  
21            **NE INTERCONNECTION PROCESS UNDER THE CURRENT**  
22            **PROCESS.**

---

<sup>6</sup> See Schedule 23, Section 1.1. See, also, definition of Interconnection Request in Schedule 22.

1      *Example of Determination: Feeder with Existing Generator*



2

3      Under the current process, a request to connect a Generation Facility to the

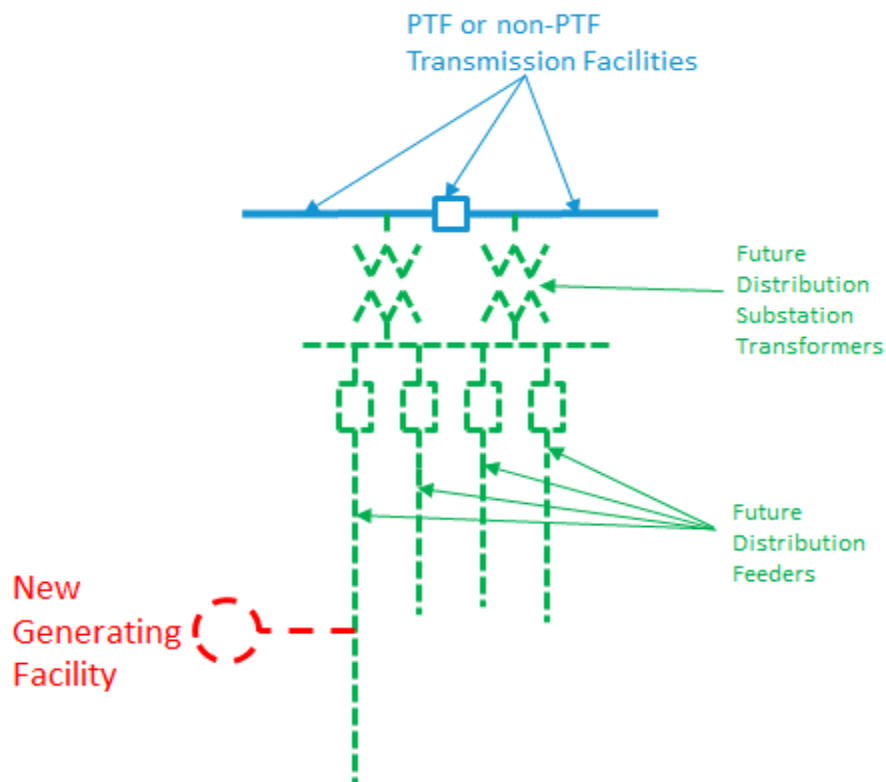
4      Distribution System at a distribution facility that does host an existing wholesale

5      transaction at the time of the request is subject to the ISO's Interconnection

6      Procedures (under the current rules), unless one of the exemptions applies.

7

8      *Example of Determination: Feeder Without Existing Generator*



1  
2 In assessing a request to connect a Generation Facility to an existing distribution  
3 facility that the PTO has determined is non-OATT distribution, a PTO may  
4 identify the need to build out the Distribution System in order to accommodate  
5 the request (as opposed to simply connecting to the existing distribution facility).  
6 The ISO's Interconnection Procedures have not been triggered in this scenario.

7  
8 **Q: IN ADDITION TO THE INTERCONNECTION PROCESS, WHAT**  
9 **OTHER PROCESS IS A NEW DER REQUIRED TO GO THROUGH?**

10 **A:** In addition to the interconnection process (regardless of whether it is the ISO  
11 interconnection process or a state's interconnection process), a new DER has to  
12 go through the ISO's Proposed Plan Application ("PPA") process pursuant to

1           Section I.3.9 of the ISO-NE Tariff.<sup>7</sup> As the RTO for New England, the ISO is  
2           responsible for reviewing and approving proposed system changes, such as  
3           generation additions or changes or transmission additions or changes, because  
4           these changes may impact the stability, reliability, or operating characteristics of  
5           the New England power system.<sup>8</sup> Accordingly, the purpose of the PPA process is  
6           to determine whether a new resource (including a new DER or accumulations of  
7           new DERs) could have an adverse impact on the reliability or operating  
8           characteristics of the ISO-administered system or any other affected system.<sup>9</sup>

9

10   **Q:     PLEASE EXPLAIN THE PPA PROCESS THAT THE ISO CONDUCTS**  
11       **PURSUANT TO SECTION I.3.9 OF THE TARIFF.**

12   **A:     The procedural details associated with the implementation of the Section I.3.9**  
13       **Tariff requirements are contained in ISO New England Planning Procedure No. 5-**  
14       **1 - Procedures for Review of Market Participant's or Transmission Owner's**

---

<sup>7</sup> Resources that are equal to or less than 1 MW do not require the ISO's review under Section I.3.9 of the Tariff.

<sup>8</sup> Under Section I.3.9 of the Tariff, each Market Participant and Transmission Owner shall submit to the ISO at least 60 days prior to the proposed in-service date (i) any new or materially changed plan for additions to or changes to any generating and demand resources or transmission facilities rated 69 kV or above subject to the control of the Market Participant or Transmission owner, and (ii) any new or materially changed plan for any other action to be taken by the Market Participant or Transmission Owner (except for retirements of or reductions in the capacity of a generating resource or demand resource) which may have a significant effect on the stability, reliability, or operating characteristics of the Transmission Owner's transmission facilities, the transmission facilities of another Transmission Owner, or the System of a Market Participant.

<sup>9</sup> Pursuant to Section 3.03 of the Transmission Operating Agreement, a PTO or its distribution company affiliate must notify the ISO of situations where the interconnection of multiple generators to distribution facilities that are not OATT Interconnection Distribution Facilities may have cumulative impacts affecting the facilities used for the provision of regional transmission service and must, in such situations, consult with the ISO in its performance of such studies. The ISO will determine whether such interconnections will have a cumulative impact on facilities used for the provision of regional transmission service. In the case of non-OATT interconnections, the ISO's review of cumulative impact is conducted as part of the process specified in Section I.3.9 of the ISO-NE Tariff.

1 Proposed Plans (Section I.3.9 Applications: Requirements, Procedures and  
2 Forms) (“PP 5-1”). The full PPA process, which includes study requirements as  
3 described below, applies to any new or increased generation that is equal to or  
4 greater than 5 MW (these projects must include PPA forms and supporting  
5 materials in their submittals to the ISO made under Section I.3.9 of the ISO-NE  
6 Tariff). These requirements also apply to new or increased generation greater  
7 than 1 MW but less than 5 MW, when the ISO has determined that such  
8 interconnection(s) will have a cumulative impact on the regional transmission  
9 system. In the case of new or increased generation greater than 1 MW but less  
10 than 5 MW, when the ISO has determined that such interconnection(s) will not  
11 have a cumulative impact on the regional transmission system, these projects must  
12 submit generator notification forms (“GNFs”), but no supporting study is required  
13 by PP 5-1.<sup>10</sup> The submittal must be supported by a transmission study that meets  
14 the requirements of ISO-NE Planning Procedures to ensure that there is no  
15 significant adverse effect upon the reliability or operating characteristics of the  
16 utility’s transmission facilities, the transmission facilities of another utility, or the  
17 system of a Market Participant. The PTO is responsible for scoping and  
18 conducting this transmission study, in coordination with the ISO. Once the  
19 transmission study is complete, the PTO must present the study results and  
20 identification of any needed upgrades to the NEPOOL Reliability Committee for

---

<sup>10</sup> Note that an interconnection study will still always take place for such a project, either under the state interconnection process or pursuant to the ISO interconnection process if jurisdiction has been triggered.

1 an advisory vote. After this vote, the ISO will issue a determination approving or  
2 denying the PPA.<sup>11</sup>

3

4 **Q: PLEASE DESCRIBE THE STUDY AND MODELING REQUIREMENTS**  
5 **THAT ARE USED IN THE EVALUATION OF NEW OR MODIFIED**  
6 **GENERATION.**

7 **A:** Pursuant to Section 2.1 of PP 5-1, new or modified generation that will require a  
8 PPA must meet the analysis requirements of ISO New England Planning  
9 Procedure No. 5-3 - Guidelines for Conducting and Evaluating Proposed Plan  
10 Application Analyses (“PP 5-3”) and ISO New England Planning Procedure No.  
11 5-6 – Interconnection Planning Procedure for Generation and Elective  
12 Transmission Upgrades (“PP 5-6”), as well as the modeling requirements of PP 5-  
13 6.

14

15 **Q: PLEASE DESCRIBE THE ANALYSIS THAT IS PERFORMED TO MEET**  
16 **THE REQUIREMENTS OF PP 5-6.**

17 **A:** PP 5-6 provides a detailed description of the analyses that are required in  
18 association with the evaluation of new or modified generation. It is important to  
19 note that the same evaluation standards are used for generation that is proceeding  
20 through the ISO interconnection queue and for generation that is seeking PPA

---

<sup>11</sup> Section I.3.9 of the Tariff provides that, unless the ISO notifies the Market Participant or Transmission Owner in writing within 60 days of the submittal (or 90 days if the ISO determines it requires additional time), that it has determined that implementation of the plan will have a significant adverse effect upon the reliability or operating characteristics of the Transmission Owner’s transmission facilities, the transmission facilities of another Transmission Owner, or the system of a Market Participant, the Market Participant or Transmission Owner is free to proceed.



1 approval having completed the state interconnection process. PP 5-6 describes  
2 the standards and conditions of the study, including the level of redispatch that is  
3 allowed in meeting the interconnection standard. All generation proposals,  
4 including DERs or accumulations of DERs, undergo similar scopes of analysis.  
5 Steady state testing evaluates thermal, voltage, and short circuit testing impacts on  
6 the New England transmission system. Stability testing is performed to ensure  
7 that the system meets the stability requirements. In addition, the electromagnetic  
8 transient tool Power System Computer Aided Design (“PSCAD”) is used in the  
9 case of larger accumulations of inverter-based DERs, especially in the vicinity of  
10 other inverter-based equipment. The PSCAD testing ensures that the DERs will  
11 meet the New England ride-through requirements, that the system is stable  
12 without control interactions and that there is not an unacceptable loss of source.

13  
14 **Q: DO THE PTOs SOMETIMES USE CLUSTERS TO GROUP DERs IN**  
15 **INTERCONNECTION STUDIES?**

16 **A:** Yes. Depending on the timing and extent of proposed DER interconnections, the  
17 PTOs have used clusters to groups DER projects in combined study efforts. The  
18 rules for cluster formation are determined under the relevant state interconnection  
19 procedures.

20  
21 **Q: HAVE TRANSMISSION SYSTEM UPGRADES BEEN IDENTIFIED FOR**  
22 **DERs AS A RESULT OF THE PPA TESTING?**

1    **A:**     Yes. The testing has identified thermal upgrades to address overloaded  
2           transmission lines as well as the addition of reactive devices to address voltage  
3           violations. Dynamic reactive devices have also been required to address issues  
4           identified in stability and PSCAD testing.

5  
6    **Q:     WHAT IS THE COST RESPONSIBILITY FOR THE UPGRADES THAT**  
7           **ARE IDENTIFIED?**

8    **A:**     In New England, the project proponent (in this case the DER proponent) is  
9           responsible for ensuring that the upgrades occur. In the case where multiple DER  
10          projects are found responsible for a transmission system upgrade, the costs are  
11          allocated under the relevant state's cost allocation rules.

12  
13   **Q:     WHAT MATERIALS HAVE TO BE PROVIDED IN SUPPORT OF A**  
14          **PPA?**

15   **A:**     As described in PP 5-1, materials submitted with a PPA must be adequate to  
16          support the proposal. In particular, a PPA must include: (1) a description of the  
17          proposed facilities, including how the modified system will be operated and a  
18          brief reason for the proposal, as well as a map showing geographical location, a  
19          one-line diagram of the affected portion of the power system, and a switching  
20          diagram including the proposed facility and nearby facilities. In addition, a  
21          generation PPA must include, as appropriate, a description of system  
22          representation used in studies, including load flow studies, dynamic studies and  
23          other testing (transient network analysis, short circuit analysis, etc.). Also, as

1 appropriate, a description of the baseline performance without the modification, a  
2 summary of the tests conducted with the modification, and the resulting system  
3 performance in terms of its conformance to Reliability Standards must be  
4 provided. Finally, arguments for approval of the application consistent with the  
5 provisions for steady state analyses,<sup>12</sup> stability analyses,<sup>13</sup> and other testing<sup>14</sup> must  
6 be presented.

7  
8 **Q: PLEASE DESCRIBE THE ISO/RELIABILITY COMMITTEE**  
9 **EVALUATION OF THE STUDIES SUBMITTED IN SUPPORT OF THE**  
10 **PPA.**

11 **A:** Pursuant to Section 3.2 of PP 5-3, the ISO and the Reliability Committee will  
12 evaluate a number of aspects of the studies submitted in support of a PPA. The  
13 ISO will consult with Affected Entities, as appropriate, regarding testing and  
14 aspects of the proposed plan that are specific to their respective systems. The  
15 evaluation of the acceptability of the proposed changes or additions begins with  
16 review of the adequacy and acceptability of testing and test results. The results of  
17 tests performed and submitted in support of proposed additions or changes in  
18 facilities should clearly demonstrate compliance with the desired level of  
19 reliability as outlined in the Reliability Standards. The level of performance  
20 expected is intended to: (1) assure the reliability of the overall interconnected

---

<sup>12</sup> Section I.3.3 of PP 5-3.

<sup>13</sup> Section 3.5.3 of PP 5-3.

<sup>14</sup> Section 3.4 of PP 5-3.

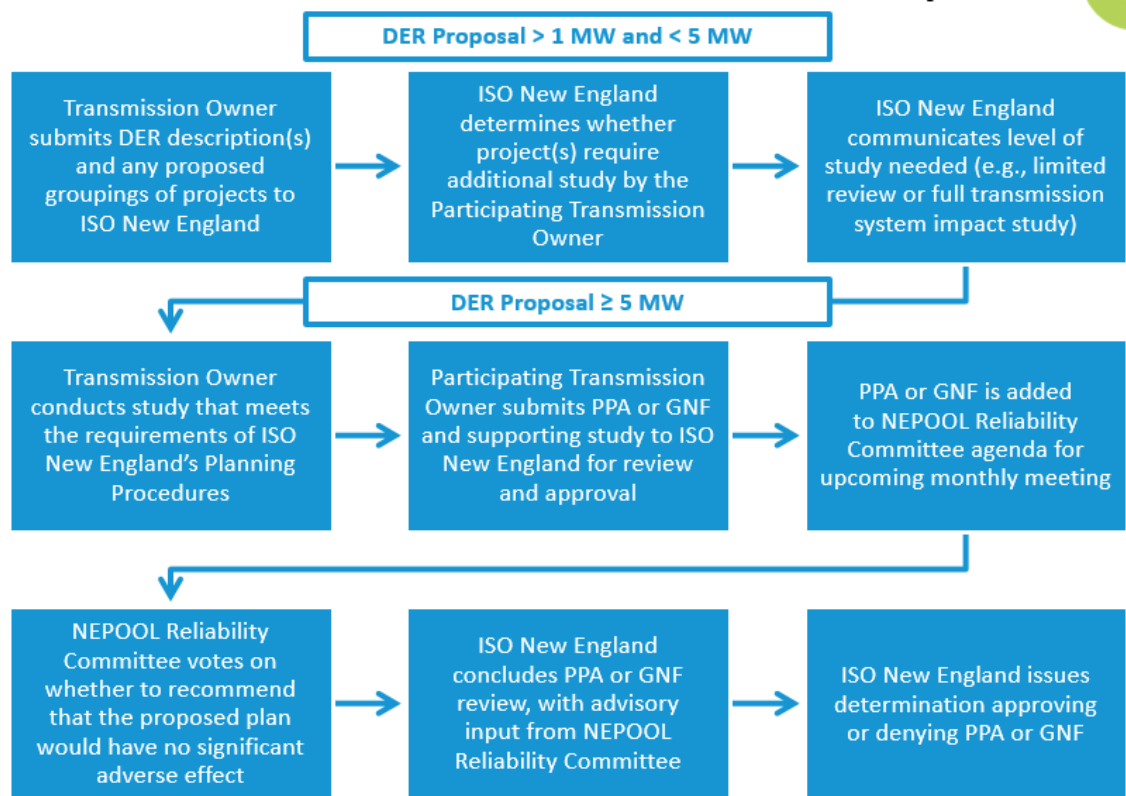
1 system and minimize the risk of widespread cascading outages due to overloads,  
2 instability or voltage collapse; and (2) demonstrate that the Nuclear Plant  
3 Interface Requirements as documented in Master/Local Control Center Procedure  
4 No. 1 – Nuclear Plant Transmission Operations, are met.

5  
6 Demonstration of acceptable system performance under the enumerated  
7 conditions and assumptions is considered the minimum level of compliance.  
8 Additional testing, evaluations or adjustments to assumptions may be deemed  
9 necessary to either assure the adequacy of system performance or to distinguish a  
10 sensitivity to one particular condition from a more general system weakness. The  
11 final conclusions and recommendations have to be based on the informed  
12 engineering judgment of the Reliability Committee with the objective of assuring  
13 that proposed changes or additions in facilities will not have a significant adverse  
14 impact on the stability, reliability or operating characteristics of the  
15 interconnected bulk power system. Generally, if results of testing indicate that the  
16 system is not sufficient to accommodate the proposed changes or additions in  
17 facilities, system reinforcements or other mitigating measures will be required.  
18 These reinforcements or mitigating measures should fully alleviate all adverse  
19 impacts that were introduced by the proposed change or addition. Occasionally,  
20 testing may identify weaknesses in the system prior to introduction of the  
21 proposed change or addition in facilities. The degree to which the proposed  
22 change or addition further degrades the stability, reliability or operating  
23 characteristics of the system will be of primary concern. Where no significant

impact is identified, it is possible to conclude that the proposed change or addition does not degrade system reliability.

**Q: PLEASE PROVIDE A FLOW CHART THAT DEPICTS THE INTERCONNECTION PROCESS FOR NEW DER PROPOSALS IN NEW ENGLAND.**

**A:** Below is a flow chart that depicts the interconnection process for new DER proposals in New England.



**II. PROBLEMS WITH THE CURRENT APPROACH FOR  
INTERCONNECTION OF NEW DERs**

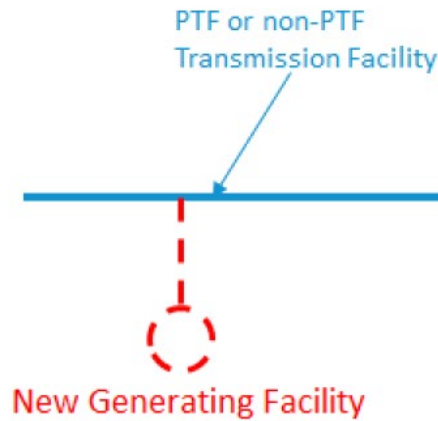
**Q: PLEASE EXPLAIN THE PROBLEMS WITH THE CURRENT  
APPROACH UNDER WHICH SOME DERs INTERCONNECT  
THROUGH THE ISO-NE INTERCONNECTION PROCESS AND OTHER  
DERs INTERCONNECT THROUGH A STATE INTERCONNECTION  
PROCESS.**

**A:** The application of two interconnection processes to the same electrical facilities results in multiple coordination problems and inefficiencies that in some cases result in adverse outcomes for DER developers. For example, after a PTO has determined that a new DER has to go through the applicable state interconnection process, DER developers have submitted interconnection requests to the PTO and, based on those requests, have participated in the Forward Capacity Auction. After the new DER has acquired a Capacity Supply Obligation in that Forward Capacity Auction, during the qualification process for the subsequent Forward Capacity Auction, the PTO has determined that there was an error in the determination (such that the DER should have gone through the ISO interconnection process) and so the DER developer has to start over by submitting an Interconnection Request to the ISO.

**Q: WHAT ARE SOME OF THE CAUSES FOR THE PROBLEMS WITH THE  
CURRENT APPROACH FOR INTERCONNECTION OF NEW DERs?**

1    **A:**     The PTOs are responsible for maintaining the models for the distribution system  
2             and studying distribution impacts, regardless of which interconnection process  
3             DERs follow. Hence, the PTOs are responsible for determining whether a new  
4             DER that is seeking to interconnect has to follow the ISO-NE interconnection  
5             process or the applicable state interconnection process. The mechanisms that  
6             PTOs use for this purpose differ, and the assumptions that underlie their  
7             determinations may also vary.

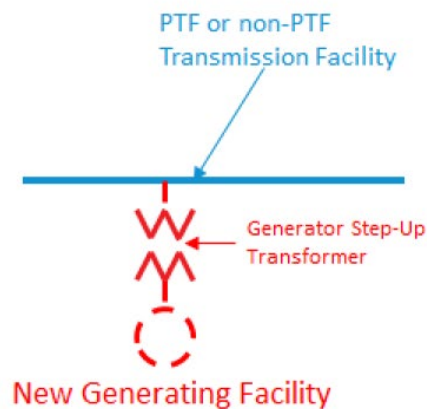
8  
9             When determining whether a distribution facility to which a new DER seeks to  
10            interconnect is subject to the ISO-NE OATT, the ISO considers distribution  
11            facilities to be the portion of the electric system connected to an existing circuit  
12            breaker or auto re-closer on a circuit or a feeder leaving a substation – so the  
13            physical boundary of a distribution facility would be the circuit breaker or auto re-  
14            closer. ISO-NE also considers any three-phase or single-phase laterals supplied  
15            by the feeder, which are typically protected by pole top fuses alone, as part of the  
16            feeder. The following figures illustrate the methodologies that some of the PTOs  
17            have employed in demarcating the physical boundaries for purposes of assessing  
18            the status of the distribution facility at the time an interconnection request is  
19            made.



**Figure 1**

*A request for a direct connection of a Generating Facility to PTF or Non-PTF, which are transmission facilities, is subject to ISO-NE Interconnection Procedures, unless one of the exemptions applies.*

1

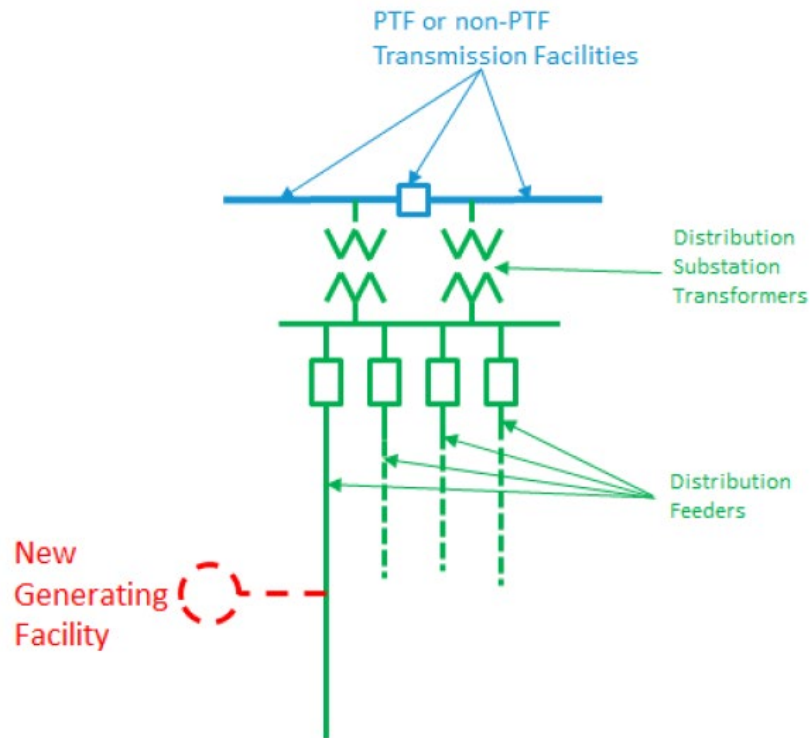


**Figure 2 –**

*A request for a direct connection of a Generating Facility using a generator step-up transformer to PTF or Non-PTF is subject to the ISO-NE Interconnection Procedures, unless one of the exemptions applies.*

2



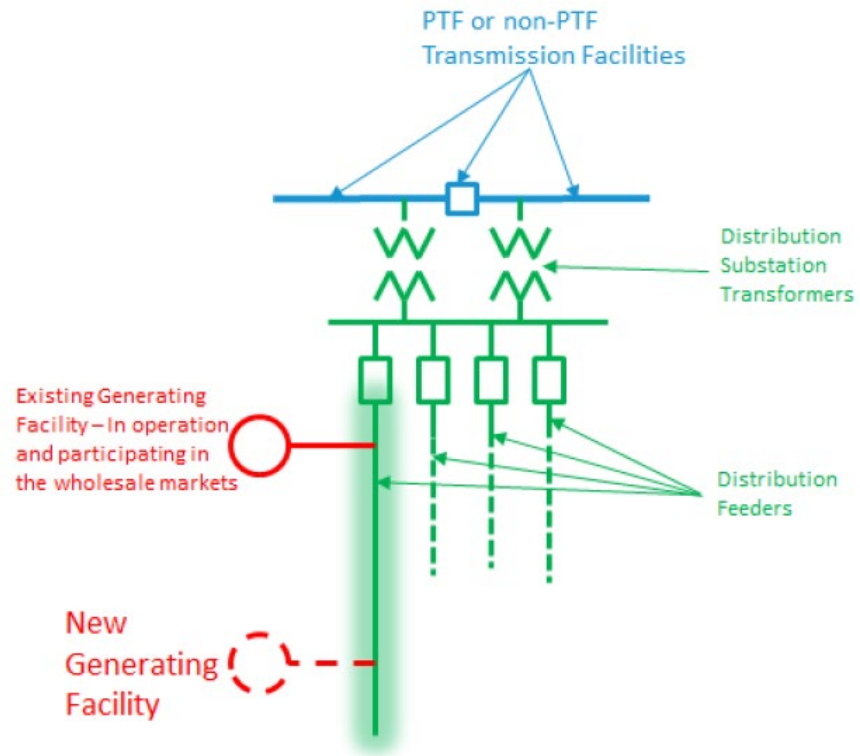


**Figure 3**

*A request to connect a Generation Facility to the Distribution System at a distribution facility that does not host an existing wholesale transaction at the time of the request is not subject to the ISO-NE Interconnection Procedures.*

1

2

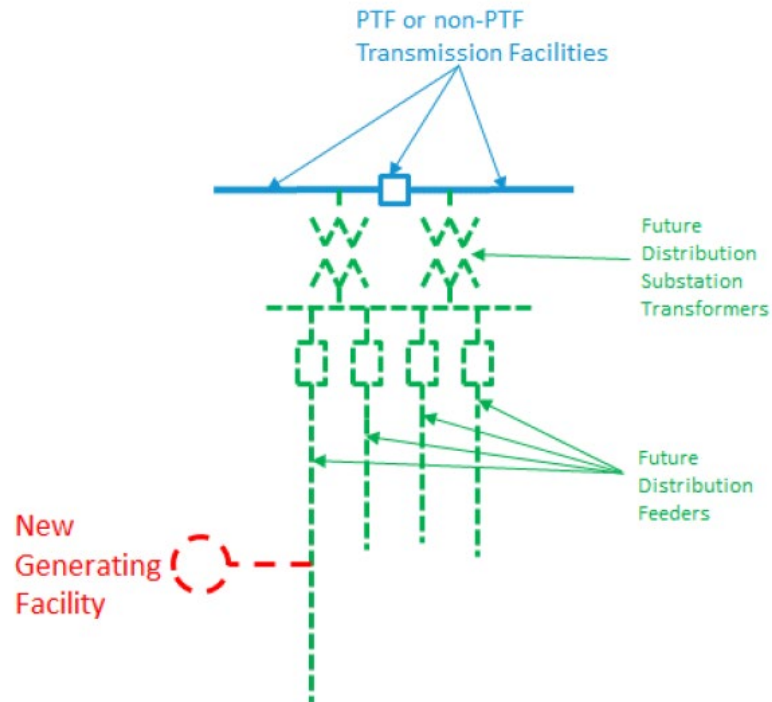


**Figure 4**

*A request to connect a Generation Facility to the Distribution System at a distribution facility that does host an existing wholesale transaction at the time of the request is subject to the ISO-NE Interconnection Procedures, unless one of the exemptions applies.*

1

2



*Figure 5*

*In assessing a request to connect a Generation Facility to an existing distribution facility that the PTO has determined is non-OATT distribution, a PTO may identify the need to build out the Distribution System in order to accommodate the request (as opposed to simply connecting to the existing distribution facility). The ISO-NE Interconnection Procedures have not been triggered in this scenario.*

1

2

3 **Q: DOES THE NUMBER OF DERs INTERCONNECTING IN NEW**  
 4 **ENGLAND EXACERBATE THE PROBLEMS YOU HAVE DESCRIBED?**

5 **A:** Yes. The great number of DERs developed in the past five years has made it  
 6 increasingly difficult for the PTOs to track the status of thousands of feeders  
 7 throughout New England. That status is time-dependent and requires tracking the  
 8 intent of each DER developer four years in the future to determine if an  
 9 exemption to the ISO interconnection process applies. All these complexities  
 10 have led to errors in feeder status determinations, with negative results for DER  
 11 developers.

1   **Q:    DOES THE APPLICATION OF EXEMPTIONS IN THE**  
2       **DETERMINATION OF WHETHER A NEW DER IS SUBJECT TO THE**  
3       **ISO-NE INTERCONNECTION PROCESS ADD TO THE PROBLEMS**  
4       **YOU HAVE DESCRIBED?**

5   **A:**   Yes. Applying the current exemptions to the application of the ISO  
6       interconnection process as well as additional exceptions under Order No. 2222  
7       can lead to different outcomes with two interconnection processes applying at the  
8       same time on the same or neighboring feeders. The exemptions are also situation  
9       and time dependent (and can change), and so some DER developers are being  
10      forced to complete two interconnection processes (*i.e.*, they complete the state  
11      process first, and then the ISO process), with no reliability need to do so.  
12      Consequently, the application two interconnection process on the same feeders  
13      and across neighboring feeders has become prohibitively difficult in New  
14      England.

15  
16   **Q:    DOES THE DEVELOPMENT OF NEW DERs IN NEW ENGLAND**  
17       **RESULT IN THE NEED FOR THE TARIFF REVISIONS?**

18   **A:**   Yes. When the Commission issued Order Nos. 2003 and 2006, it anticipated that  
19       the standard interconnection procedures and agreement terms would rarely  
20       applied to distributed generation. That has not been the case in New England,  
21       where renewable portfolio standards and state policies promoting distributed  
22       generation have resulted in an exponential growth of DERs, which in turn has  
23       greatly increased the number of small generator interconnection requests that

1 ISO-NE has had to process over the past five years. Hence, the Commission  
2 anticipates that DER aggregations established pursuant to Order No. 2222 will  
3 significantly increase the number of DER interconnections to distribution  
4 facilities for the purpose of engaging in wholesale transactions, thereby increasing  
5 the number of distribution-level interconnections subject to the Commission's  
6 jurisdiction. That significant increase has already taken place in New England  
7 because of the great number of new individual DER projects seeking to  
8 interconnect as well as modifications to existing DERs (in the form of increased  
9 capacity/other physical changes, or a decision to participate in the ISO's markets  
10 after the DER is already in service), which also trigger the ISO's interconnection  
11 process. As such, ISO-NE anticipates becoming burdened with an overwhelming  
12 volume of interconnection requests. Accordingly, given the great number of new  
13 DERs being developed in New England, the Tariff Revisions are necessary.

14  
15 **Q: WHY IS IT IMPORTANT TO MAKE THESE TARIFF REVISIONS**  
16 **NOW?**

17 **A:** The approach based on the state interconnection process supported by PPA  
18 review under Section I.3.9 of the Tariff has been successful in moving a large  
19 number of DER projects forward up to this point. DER projects have been  
20 completing development, interconnecting, and registering in the ISO markets.  
21 This means, however, that the number of jurisdictional feeders is about to increase  
22 significantly over time. Without the proposed Tariff Revisions, more and more  
23 DERs will be identified as required to proceed through the ISO interconnection

1 process. At the same time, other nearby DERs will be identified as state  
2 jurisdictional, either because their feeder is not yet ISO-jurisdictional or they fall  
3 under one of the exemptions. This will result in two interconnection process  
4 applying (with the extent of ISO jurisdiction continually changing and evolving)  
5 on the same or neighboring feeders at the same time. The ISO expects that this  
6 will make the going forward coordination of these interconnections prohibitively  
7 difficult and will be substantially less efficient than continuing with the state  
8 interconnection approach described above.

9

10 **III. TARIFF REVISIONS TO ADDRESS THE ISSUES PRESENTED BY**  
11 **THE CURRENT PROCESS**

12

13 **Q: PLEASE DESCRIBE HOW THE TARIFF REVISIONS SUBMITTED IN**  
14 **THIS FILING ADDRESS THE PROBLEMS YOU DESCRIBED IN**  
15 **SECTION II OF YOUR TESTIMONY.**

16 **A:** To address these problems with the current approach, the Tariff Revisions modify  
17 Schedules 22, 23, and 25 to the OATT so that new DERs always proceed through  
18 the applicable state interconnection process.<sup>15</sup> Specifically, the Tariff Revisions  
19 change the definition of Administered Transmission System in Schedules 22, 23,  
20 and 25 by deleting the words “and distribution facilities that are subject to the  
21 Tariff.” As a result, the new definition of Administered Transmission System will

---

<sup>15</sup> The Commission already established this same treatment for DER aggregations in Order No. 2222; codified at 18 C.F.R. 35.28(g)(12)(i).

1 be limited to the “PTF, and the Non-PTF.”<sup>16</sup> This, in turn, will mean that the  
2 analysis that is currently conducted to determine if a DER has to go through the  
3 ISO interconnection process (described in Section I of my testimony) will no  
4 longer be needed.

5  
6 **Q: ARE OTHER CHANGES NECESSARY TO EFFECT THE PROPOSAL?**

7 **A:** Yes. Other conforming changes are needed in Schedule 23 and Schedule 22.  
8 Specifically, language that is no longer needed (including exemptions to the ISO  
9 interconnection process) is being deleted in the following provisions:

10

11 Schedule 23: definition of Interconnection Request; Section 1.1 – Applicability;  
12 Section 1.2 – Pre-Application; Section 1.3.2 – Acknowledgement of  
13 Interconnection Request; definition of Interconnection Request in Attachment 1  
14 Schedule 22: definition of Interconnection Request in the Large Generator  
15 Interconnection Procedures and the LGIA.

16

17 **Q: HOW WILL INTERCONNECTION REQUESTS BE HANDLED DURING**

18 **THE TRANSITION BETWEEN THE CURRENT APPROACH AND THE**

---

<sup>16</sup> The definition of Administered Transmission System is also being revised in Article 1 of the Large Generator Interconnection Agreement (“LGIA”) contained in Schedule 22, Attachment 1 to the Small Generator Interconnection Procedures (“SGIP”) contained in Schedule 23, Attachment 1 to the Small Generator Interconnection Agreement (“SGIA”) contained in Schedule 23, and Article 1 of the Electric Transmission Upgrade Interconnection Agreement (“ETUIA”) contained in Schedule 25.

1       **NEW APPROACH UNDER WHICH ALL NEW DERs WILL**  
2       **INTERCONNECT THROUGH THE APPLICABLE STATE PROCESS?**

3       **A:**     In order to transition between the current approach, under which DERs  
4               interconnect either through the ISO interconnection process or the applicable state  
5               interconnection process, to the new approach, under which all DERs will  
6               interconnect through a state process, the ISO is adding language in new Sections  
7               1.6.2 of Schedule 23 and 5.1.4 of Schedule 22. Under those new provisions,  
8               Interconnection Customers (i) with Interconnection Requests for distribution  
9               facilities that were subject to the ISO-NE Tariff prior to the effective date of the  
10              Tariff Revisions; (ii) that submitted the Interconnection Requests to the ISO prior  
11              to the effective date of the Tariff Revisions; and (iii) that have not completed the  
12              applicable state interconnection process must complete the ISO's interconnection  
13              process. Interconnection Customers (i) with Interconnection Requests for  
14              distribution facilities that were subject to the ISO-NE Tariff prior to the effective  
15              date of the Tariff Revisions; (ii) that had already completed the applicable state  
16              interconnection process; and (iii) subsequently submitted an Interconnection  
17              Request to the ISO prior to the effective date of the Tariff Revisions may either  
18              complete the ISO's interconnection process or withdraw the Interconnection  
19              Request submitted to the ISO.

20

21      **Q:**     **WILL THE PPA PROCESS THAT THE ISO CONDUCTS PURSUANT TO**  
22      **SECTION I.3.9 OF THE TARIFF CHANGE?**



1    **A:**     Importantly, the PPA process under Section I.3.9 of the Tariff is not changing and  
2           new DERs will continue to be subject to that process. As such, the ISO will  
3           continue to conduct the analyses described in Section III.B of this filing letter to  
4           determine if DERs could have an adverse impact on the reliability or operating  
5           characteristics of the ISO-administered system or any other affected system.

6

7    **Q:     DO THE TARIFF REVISIONS ALLEVIATE UNCERTAINTY IN NEW**  
8           **ENGLAND REGARDING WHETHER NEW DERs SHOULD BE**  
9           **SUBJECT TO COMMISSION JURISDICTION OR STATE**  
10          **JURISDICTION?**

11   **A:**     Yes. The large influx of distribution-level interconnections has already created  
12           uncertainty in New England as to whether certain interconnections are subject to  
13           Commission jurisdiction or state jurisdiction, and whether they would require the  
14           use of the ISO-NE interconnection process. For instance, as mentioned in Section  
15           II of my testimony, the PTOs are responsible for making the determination of  
16           whether a new DER is subject to the ISO-NE interconnection process. The  
17           mechanisms that PTOs use for this purpose differ and the assumptions that  
18           underlie their determinations may also vary. In addition, due to the recent high  
19           volumes of DER interconnections, tracking the time-dependent status of  
20           thousands of feeders (including the energy market status and the intent of DER  
21           developers to determine if any exemptions to the ISO interconnection process  
22           apply) throughout New England is extremely challenging and time consuming for  
23           the PTOs. This enormous amount of work has led to several errors in feeder

1 status determinations that result in adverse outcomes for DER sponsors, who view  
2 the current approach for interconnection under two processes as a barrier for DER  
3 development. The Tariff Revisions eliminate this barrier by providing certainty  
4 on the interconnection process that will apply to all new DERs.

5  
6 **Q: DO THE TARIFF REVISIONS ALLEVIATE THE COMPLEXITY OF**  
7 **THE CURRENT PROCESS FOR DETERMINATION OF**  
8 **INTERCONNECTION JURISDICTION FOR NEW DERs?**

9 **A:** Yes. As I explain in Section II of my testimony, the exemptions to the application  
10 of the ISO interconnection process, as well as additional exceptions that will be  
11 applied pursuant to the modifications made to the Tariff under Order No. 2222,  
12 add to the complexity of the current approach and can lead to different outcomes  
13 with two interconnection processes applying at the same time on the same  
14 feeders. As such, coordination of more than one process on the same feeders and  
15 across neighboring feeders is expected to become prohibitively difficult in New  
16 England. Moreover, because exemptions are situation and time dependent (and  
17 can change), some developers are being forced to complete two interconnection  
18 process (*i.e.*, they complete the state process first, and then the ISO process), with  
19 no reliability need or benefit. Applying only the state interconnection process to  
20 all DERs (whether individually or as part of a DER aggregation) will remove the  
21 uncertainty regarding whether DER interconnections are subject to Commission  
22 jurisdiction or state jurisdiction and will eliminate the coordination problems and  
23 inefficiencies that exist today and will worsen in the future.

1   **Q:     HOW DO THE TARIFF REVISIONS ADVANCE THE OBJECTIVES OF**  
2       **ORDER Nos. 2003, 2006, AND 845?**

3   **A:**    Because new DERs will continue to be subject to the ISO's PPA process, the  
4       objective in Order Nos. 2003, 2006, and 845 to preserve reliability will continue  
5       to be met under the proposal to have all new DERs interconnect through a state  
6       process. In addition, because using only the state interconnection process not  
7       only for DER aggregations but also for individual DERs provides DER  
8       developers with flexibility and removes what they have identified as a barrier to  
9       DER development, the Filing Parties' proposal also advances the other objectives  
10      of Order Nos. 2003, 2006, and 845, *i.e.*, preventing undue discrimination,  
11      increasing energy supply, lowering wholesale prices for customers by increasing  
12      the number and types of new generation that would compete in the wholesale  
13      electricity market, reducing interconnection time and costs, and facilitating  
14      development of non-polluting alternative energy sources.

15  
16   **IV.    TARIFF REVISIONS TO ESTABLISH THE ORDER IN WHICH**  
17       **INTERCONNECTION REQUESTS ARE INCLUDED IN THE**  
18       **CAPACITY NETWORK RESOURCE ("CNR") GROUP STUDY**  
19

20   **Q:     WHAT IS CNR INTERCONNECTION SERVICE?**

21   **A:**    In early 2009, the LGIP and SGIP were revised to provide Interconnection  
22       Customers the option of two levels of interconnection service reflecting the  
23       Interconnection Customer's market participation: (1) CNR Interconnection

1 Service (for Interconnection Customers that seek to interconnect their generating  
2 facilities as capacity resources); and (2) Network Resource Interconnection  
3 Service (for Interconnection Customers that do not seek to interconnect their  
4 generating facilities as capacity resources).<sup>17</sup> Under the CNR Interconnection  
5 Service option, Interconnection Customers can interconnect their facilities under  
6 the Capacity Capability (“CC”) Interconnection Standard up to the generating  
7 facility’s CNR Capability based on the generating facility’s Capacity Supply  
8 Obligation acquired in the Forward Capacity Market (“FCM”).<sup>18</sup> The CC  
9 Interconnection Standard includes the interconnection requirements under the  
10 Minimum Interconnection Standard (“MIS”), as well as the FCM’s overlapping  
11 interconnection impacts test to assure the deliverability of generating facilities’  
12 output. The MIS component ensures that the interconnection of the proposed new  
13 generating facility does not create an adverse effect on the ISO’s ability to  
14 reliably operate and maintain the New England Transmission System.<sup>19</sup> The  
15 overlapping interconnection impacts analysis component determines whether the  
16 proposed new generating facility can provide incremental capacity to the system  
17 (*i.e.*, it can operate without redispatch of other capacity resources).<sup>20</sup>

---

<sup>17</sup> Joint Filing of Proposed Revisions to the Generator Interconnection Process and Forward Capacity Market Participation Provisions Set Forth in the ISO New England Inc. Transmission, Markets and Services Tariff, *ISO New England Inc.*, Docket Nos., ER04-432-006, ER04-433-006, ER07-546-013, ER07-547-003, (Oct. 31, 2008) at 26-27, accepted in *ISO New England Inc.*, 126 FERC ¶ 61,080 (2009).

<sup>18</sup> *Id.* at 27.

<sup>19</sup> *Id.* at 28.

<sup>20</sup> *Id.*

1   **Q:     WHAT IS THE CNR GROUP STUDY?**

2   **A:**    The CNR Group Study refers to the analysis performed during the FCM  
3           qualification process, in accordance with Section III.13.1.1.2.3 of the Tariff, to  
4           determine the interconnection requirements, including the overlapping  
5           interconnection impacts analysis. Specifically, pursuant to Section III.13.1.1.2.3  
6           of the Tariff, for each New Generating Capacity Resource seeking to participate  
7           in the FCM, the ISO conducts an initial interconnection analysis in the form of a  
8           group study. Participation in a CNR Group Study is a prerequisite to achieve  
9           CNR Interconnection Service and CNI Interconnection Service.<sup>21</sup>

10

11   **Q:     PRESENTLY, HOW ARE INTERCONNECTION REQUESTS INCLUDED**  
12   **IN THE CNR GROUP STUDY?**

13   **A:**    The order for Interconnection Requests to be included in the CNR Group Study is  
14           established in Section 4.1.1 of Schedule 22, Section 1.5.2 of Schedule 23, and  
15           Schedule 4.1.1 of Schedule 25. Presently, those provisions specify the order of  
16           inclusion for Interconnection Requests submitted in the ISO-NE interconnection  
17           process, but do not specify when interconnection requests submitted in the state  
18           processes are to be included in the CNR Group Study. Those details are needed

---

<sup>21</sup> Capacity Network Import Interconnection Service (“CNI Interconnection Service”) is defined in Schedule 25 to mean, for an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s Capacity Network Import Interconnection Service is for the megawatt of Capacity Network Import Capability. Capacity Network Import Interconnection Service does not in and of itself convey transmission service.

1 to determine the order of testing for deliverability and the identification of  
2 upgrades (if needed).<sup>22</sup>

3

4 **Q: HOW DO THE TARIFF REVISIONS IMPROVE THE CNR GROUP**  
5 **STUDY?**

6 **A:** To improve the CNR Group Study, in the present filing, the Filing Parties propose  
7 to add language in Section 4.1.1 of Schedule 22, Section 1.5.2 of Schedule 23,  
8 and Section 4.1.1 of Schedule 25 to establish the order in which interconnection  
9 requests submitted in the state process will be included in the CNR Group  
10 Studies. First, the ISO will include all Interconnection Requests submitted in the  
11 ISO-NE interconnection process *and* all interconnection requests submitted in the  
12 state processes that have received Tariff Section I.3.9 approval from the ISO.  
13 These interconnection requests will be included in order of submission (for the  
14 Interconnection Requests submitted in the ISO-NE interconnection process) or  
15 PPA approval (for the interconnection requests submitted in the state processes).  
16 After all those interconnection requests are included in the CNR Group Study, the  
17 ISO will include interconnection requests submitted in the state interconnection  
18 processes that do not have an ISO-approved PPA at the time when the CNR  
19 Group Study commences. These interconnection requests will be included in  
20 order of submission to the Interconnecting Transmission Owners or their  
21 distribution affiliates.

---

<sup>22</sup> While ISO New England Planning Procedure No. 10 has included some detail on the order for inclusion of interconnection requests in the CNR Study, it is now appropriate to formalize the proposed approach in the Tariff to improve the coordination of interconnection studies.

**V. TARIFF REVISIONS TO INCLUDE GENERATION PROJECTS THAT ARE NOT PARTICIPATING IN THE ISO'S INTERCONNECTION PROCESS, IF THEY MEET CERTAIN CONDITIONS, IN THE BASE CASE DATA**

**Q: PLEASE DESCRIBE THE BASE CASE DATA PROVISIONS OF THE ISO-NE INTERCONNECTION PROCEDURES.**

**A:** The ISO coordinates interconnection studies pursuant to the Base Case Data provisions in Schedules 22 and 25 (while there is no similar provision in Schedule 23, the Schedule 22 provision is incorporated by reference in Schedule 23 pursuant to Order No. 2006).<sup>23</sup> Specifically, under Section 2.3 of Schedule 22, the ISO is required to maintain Base Case power flow, short circuit, and stability databases, including all underlying assumptions, and contingency lists on a secured location on its website. The Base Cases must include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the ISO's sole judgement, may have an impact on the Interconnection Request.

**Q: WHAT IS THE ISSUE THAT RESULTS FROM APPLICATION OF THE BASE CASE DATA PROVISIONS?**

---

<sup>23</sup> See Order No. 2006 at P 59.

1    **A:**     Currently, in the Base Case for an Interconnection Request submitted in the ISO-  
2           NE interconnection process, projects that that are not in the ISO interconnection  
3           queue are not included until they have PPA approval from the ISO. Projects that  
4           do not have PPA approval have to respect new projects in the ISO interconnection  
5           queue once their studies commence and their Base Cases are established. This  
6           creates some uncertainty when a project that is going through the state  
7           interconnection queue is approaching the completion of the interconnection  
8           studies.

9

10   **Q:     HOW DO THE TARIFF REVISIONS ADDRESS THIS ISSUE?**

11   **A:**     To address this issue and improve the coordination of interconnection studies, the  
12           Filing Parties propose to add language in the Base Case Data provisions (Section  
13           2.3 of Schedule 22, and Section 2.3 of Schedule 25) to specify that the Base Cases  
14           must also include generation projects that are not participating in the ISO's  
15           interconnection process, but are expected to achieve PPA approval within 90 days  
16           from the date of the creation of the Base Cases and for which steady state, short  
17           circuit and stability models for the generation projects and any associated system  
18           upgrades have been provided to the ISO.

19

20   **Q:     PLEASE PROVIDE AN EXAMPLE OF HOW THE TARIFF REVISIONS**  
21           **WILL BE APPLIED IN PRACTICE.**

22   **A:**     The ISO coordinates closely with the PTOs in their conduct of the state  
23           interconnection studies for PPA approval. The ISO reviews the scope and the



1 study findings and results. As a part of this coordination, a target date will be  
2 identified, by which the DER study is expected to be complete. Once the DER  
3 study is 90 days from completion, the DER, along with any relevant system  
4 upgrades, will be included in the Base Case for any ISO interconnection projects  
5 that subsequently start.

6

7 **Q: DOES THIS CONCLUDE YOUR TESTIMONY?**

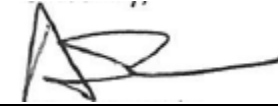
8 A: Yes.

1 I declare that the foregoing is true and correct.

2

3

4

A handwritten signature in black ink, appearing to be 'Alan McBride', written over a horizontal line.

5

Alan McBride

6

7 June 29, 2022

## **SCHEDULE 22**

### **LARGE GENERATOR INTERCONNECTION PROCEDURES**

## **TABLE OF CONTENTS**

SECTION 1.	DEFINITIONS
SECTION 2.	SCOPE, APPLICATION AND TIME REQUIREMENTS.
2.1	Application of Standard Large Generator Interconnection Procedures.
2.2	Comparability
2.3	Base Case Data
2.4	No Applicability to Transmission Service
2.5	Time Requirements
SECTION 3.	INTERCONNECTION REQUESTS
3.1	General
3.2	Type of Interconnection Services and Long Lead Time Facility Treatment
3.3	Utilization of Surplus Interconnection Service
3.4	Valid Interconnection Request
3.5	OASIS Posting
3.6	Coordination with Affected Systems
3.7	Withdrawal
3.8	Identification of Contingent Facilities
SECTION 4.	QUEUE POSITION
4.1	General
4.2	Clustering
4.3	Transferability of Queue Position
4.4	Modifications
SECTION 5.	PROCEDURES FOR TRANSITION
5.1	Queue Position for Pending Requests
5.2	Grandfathering
5.3	New System Operator or Interconnecting Transmission Owner
SECTION 6.	INTERCONNECTION FEASIBILITY STUDY
6.1	Interconnection Feasibility Study Agreement
6.2	Scope of Interconnection Feasibility Study
6.3	Interconnection Feasibility Study Procedures
6.4	Re-Study
SECTION 7.	INTERCONNECTION SYSTEM IMPACT STUDY

7.1	Interconnection System Impact Study Agreement
7.2	Execution of Interconnection System Impact Study Agreement
7.3	Scope of Interconnection System Impact Study
7.4	Interconnection System Impact Study Procedures
7.5	Meeting with Parties
7.6	Re-Study
7.7	Operational Readiness
SECTION 8.	INTERCONNECTION FACILITIES STUDY
8.1	Interconnection Facilities Study Agreement
8.2	Scope of Interconnection Facilities Study
8.3	Interconnection Facilities Study Procedures
8.4	Meeting with Parties
8.5	Re-Study
SECTION 9.	ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT
SECTION 10.	OPTIONAL INTERCONNECTION STUDY
10.1	Optional Interconnection Study Agreement
10.2	Scope of Optional Interconnection Study
10.3	Optional Interconnection Study Procedures
10.4	Meeting with Parties
10.5	Interconnection Agreement Developed Based on Optional Interconnection Study
SECTION 11.	STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)
11.1	Tender
11.2	Negotiation
11.3	Evidence to be Provided by Interconnection Customer; Execution and Filing of LGIA
11.4	Commencement of Interconnection Activities
SECTION 12.	CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES
12.1	Schedule
12.2	Construction Sequencing
SECTION 13.	MISCELLANEOUS
13.1	Confidentiality
13.2	Delegation of Responsibility
13.3	Obligation for Study Costs

13.4 Third Parties Conducting Studies

13.5 Disputes

13.6 Local Furnishing Bonds

## **APPENDICES TO LGIP**

APPENDIX 1 INTERCONNECTION REQUEST

APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT

APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT

APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT

APPENDIX 6 LARGE GENERATOR INTERCONNECTION AGREEMENT

APPENDIX 7 INTERCONNECTION PROCEDURES FOR WIND GENERATION

## SECTION I. DEFINITIONS

The definitions contained in this section are intended to apply in the context of the generator interconnection process provided for in this Schedule 22 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of generator interconnections under this Schedule 22. Capitalized terms in Schedule 22 that are not defined in this Section I shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF, and the Non-PTF, ~~and distribution facilities that are subject to the Tariff.~~

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.



**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**At-Risk Expenditure** shall mean money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (i) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and surveys, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** shall have the meaning specified in Section 2.3.

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability data bases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility

seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispach of other Capacity Network Resources or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** shall mean that portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** shall mean the MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Large Generating Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise. Confidential

Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades associated with an Interconnection Request with a higher Queue Position or a transmission project that is planned or proposed for the New England Transmission System upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission

Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the Standard Large Generator Interconnection Agreement to possess black start capability.

**Engineering & Procurement ("E&P") Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to

exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** shall mean a Transmission Owner that owns, leases or otherwise possesses an interest, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Large Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Generating Facility with the Administered Transmission System under the Standard Large Generator Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of an existing Generation Facility; (iv) make a Material Modification to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System; (v) commence participation in the wholesale markets by an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service for all or part of a Generating Facility's capability. Interconnection Request shall not include ~~:(i) a retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site; (ii) a request to interconnect a new Generating Facility to a distribution facility that is subject to the Tariff if the Generating Facility will not be used to make wholesale sales of electricity in interstate commerce; or (iii)~~ a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** shall mean the service provided by the System Operator, and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional



Interconnection Study described in the Standard Large Generator Interconnection Procedures.

Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other Affected System, the scope of which is described in Section 7 of the Standard Large Generator Interconnection Procedures. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a maximum gross capability at or above zero degrees F of more than 20 MW.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff, respectively.

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to

third parties, arising out of or resulting from another Party's performance, or non-performance of its obligations under the Standard Large Generator Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2.2(a) of the Tariff.

**Material Modification** shall mean: (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A (and Attachment A-1, if applicable) to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer, that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Initial Synchronization Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer's control; (iv) except as provided in Section 3.2.3.4, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard ("NC Interconnection Standard")** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability,

stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Resource (“NR”)** shall mean the portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** shall mean the MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s NR Interconnection Service shall be solely for the megawatt amount of the NR Capability requested pursuant to Section 3.1 of this LGIP. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Large Generating Facility to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Large Generator Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Standard Large Generator Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to the Interconnecting Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Provisional Interconnection Service** shall mean Network Resource Interconnection Service provided by the System Operator, and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability from the Generating Facility at the Point of Interconnection on a limited and temporary basis, pursuant to the terms of the Provisional Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Provisional Large Generator Interconnection Agreement** shall mean the Interconnection Agreement for Provisional Interconnection Service established between the System Operator, the Interconnecting Transmission Owner, and the Interconnection Customer. This agreement shall take the form of the Standard Large Generator Interconnection Agreement, modified for provisional purposes.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a "higher-queued" Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as "lower-queued."

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for which new interconnection is sought; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for which new interconnection is sought; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for which new interconnection is sought; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for which new interconnection is sought; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If the System Operator, Interconnecting Transmission Owner, and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the System Operator must provide the Interconnection Customer a written technical explanation outlining why the System Operator does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**Standard Large Generator Interconnection Agreement (“LGIA”)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, that is included in this Schedule 22 to the Tariff.

**Standard Large Generator Interconnection Procedures (“LGIP”)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in this Schedule 22 to the Tariff.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this LGIP.

**Surplus Interconnection Service** shall mean a form of Interconnection Service that allows an Interconnection Customer to use any Unused Capability of Interconnection Service established in an Interconnection Agreement for an existing Generating Facility that has achieved Commercial Operation, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the same Point of Interconnection would remain the same.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Unused Capability** shall mean: (i) in the case of NR Interconnection Service at an existing, commercial Generating Facility, the MW quantity as determined by the Original Interconnection Customer (as defined in Section 3.3 of the LGIP), not to exceed the existing, commercial Generating Facility’s NR Interconnection Service; and (ii) in the case of CNR Interconnection Service at an existing, commercial Generating Facility, for Summer, the Summer CNR Capability minus the latest Summer Qualified Capacity, and for Winter, the Winter CNR Capability minus the latest Winter Qualified Capacity.

## **SECTION 2. SCOPE, APPLICATION AND TIME REQUIREMENTS.**

### **2.1 Application of Standard Large Generator Interconnection Procedures.**

The LGIP and LGIA shall apply to Interconnection Requests pertaining to Large Generating Facilities. Except as expressly provided in the LGIP and LGIA, nothing in the LGIP or LGIA shall be construed to limit the authority or obligations that the Interconnecting Transmission Owner or System Operator, as applicable, has with regard to ISO New England Operating Documents.

### **2.2. Comparability.**

The System Operator shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this LGIP. The System Operator and Interconnecting Transmission Owner will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by the Interconnecting Transmission Owner, its subsidiaries or Affiliates, or others.

### **2.3 Base Case Data.**

System Operator shall maintain Base Case power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists on a secured location on the System Operator's website. For the purposes of this provision, Base Case Data may include the electromagnetic transient network model that does not include proprietary electromagnetic transient equipment models. System Operator shall provide access to such information located on a secured location on the System Operator's website, subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy as well as any other applicable requirement under Applicable Laws and Regulations regulating disclosure or confidentiality of such information. System Operator shall maintain network models and underlying assumptions on a secured location on the System Operator's website. Such network models and underlying assumptions should reasonably represent those used during the most recent Interconnection Study and be representative of current system conditions as of the most recent Interconnection Study. The databases and lists addressed in this Section 2.3, hereinafter referred to as Base Cases, shall include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. The Base Cases shall also include generation projects that are

not participating in the System Operator's interconnection process, but are expected to achieve approval pursuant to Section I.3.9 of the Tariff within 90 days from the date of the creation of the Base Cases and for which steady state, short circuit and stability models for the generation projects and any associated system upgrades have been provided to the System Operator. The Interconnection Customer, where applicable, shall provide Base Case Data to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

System Operator shall provide a link to the secured location on its website that contains the information required under this Section 2.3 on System Operator's OASIS site. System Operator is permitted to require that Interconnection Customers or their third party consultants, OASIS site users, and users of the secured location on System Operator's website sign a confidentiality agreement before the release of information governed by Section 13.1 or the ISO New England Information Policy, or the release of any other information that is commercially sensitive or Critical Energy Infrastructure Information.

#### **2.4 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

#### **2.5 Time Requirements.**

Parties that must perform a specific obligation under a provision of the Standard Large Generator Interconnection Procedure or Standard Large Generator Interconnection Agreement within a specified time period shall use Reasonable Efforts to complete such obligation within the applicable time period. A Party may, in the exercise of reasonable discretion and within the time period set forth by the applicable procedure or agreement, request that the relevant Party consent to a mutually agreeable alternative time schedule, such consent not to be unreasonably withheld.

### **SECTION 3. INTERCONNECTION REQUESTS.**

#### **3.1 General.**

To initiate an Interconnection Request, an Interconnection Customer must comply with all of the requirements set forth in Section 3.4.1. The Interconnection Customer shall submit a separate



Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must comply with the requirements specified in Section 3.4.1 for each Interconnection Request even when more than one request is submitted for a single site.

Within three (3) Business Days after its receipt of a valid Interconnection Request, System Operator shall submit a copy of the Interconnection Request to Interconnecting Transmission Owner.

At Interconnection Customer's option, System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the Interconnection Feasibility Study Agreement, or the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

System Operator shall consider requests for Interconnection Service below the Large Generating Facility capability. An Interconnection Customer that submits an Interconnection Request for Interconnection Service below the Large Generating Facility capability shall include in the Interconnection Request the proposed control technologies to restrict the Large Generating Facility's output to the requested Interconnection Service levels. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of determining necessary Interconnection Facilities, Network Upgrades, and associated costs, and the requests shall be studied at the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the facility's output and the safety and reliability of the system, with the study costs borne by the Interconnection Customer.

Interconnection Customers may be subject to additional control technologies as well as testing and validation of those technologies consistent with Article 6 of the LGIA. The necessary control technologies and protection systems shall be established in Appendix C of the executed, or requested to be filed unexecuted, LGIA.

All deposits that must be submitted to the System Operator under this LGIP must be delivered to the System Operator's bank account by electronic transfer within the period specified in the respective provision. A deposit will not be considered received until it is in the System Operator's bank account.

### **3.2 Type of Interconnection Services and Long Lead Time Facility Treatment**

At the time the Interconnection Request is submitted, the Interconnection Customer must request either CNR Interconnection Service or NR Interconnection Service, as described in Sections 3.2.1 and 3.2.2 below. An Interconnection Customer that meets the requirements to obtain CNR Interconnection Service shall obtain NR Interconnection Service up to the NR Capability upon completion of all requirements for NR Interconnection Service, including all necessary upgrades. Upon completion of all requirements for the CNR Interconnection Service, the Interconnection Customer shall also receive CNR Interconnection Service for CNR Capability. An Interconnection Customer that meets the requirements to obtain NR Interconnection Service shall receive NR Interconnection Service for the Interconnection Customer's NR Capability. At the time the Interconnection Request is submitted, the Interconnection Customer may also request Long Lead Facility treatment in accordance with Section 3.2.3.

#### **3.2.1 Capacity Network Resource Interconnection Service**

##### **3.2.1.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which CNRs are interconnected under the CC Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Large Generating Facility to be designated as a CNR, and to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the CNR Capability or as otherwise provided in the Tariff, on the same basis as existing CNRs, and to be studied as a CNR on the assumption that such a designation will occur.

##### **3.2.1.2 The Studies.**

All Interconnection Studies for CNR Interconnection Service shall assure that the Interconnection Customer's Large Generating Facility satisfies the minimum characteristics required to interconnect in a

manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the unit. The CNR Group Study for CNR Interconnection Service shall assure that the Interconnection Customer's Large Generating Facility can be interconnected in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other CNRs and Elective Transmission Upgrades with CNI Interconnection Service, in accordance with the CC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

### **3.2.1.3 Milestones for CNR Interconnection Service.**

In addition to the requirements set forth in this LGIP, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service shall complete the following milestones prior to receiving CNR Interconnection Service for the CNR Capability, such milestones to be specified in Appendix B of the LGIA, as either completed or to be completed: (i) submit the necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date (except as modified pursuant to Sections 3.2.3 or 4.4 of this LGIP), in accordance with the provisions of Section III.13 of the Tariff; (ii) participate in a CNR Group Study for the Forward Capacity Auction associated with the requested Generating Facility's Commercial Operation Date; (iii) qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff; and (iv) complete a re-study of the applicable Interconnection Study and CNR Group Study after the Forward Capacity Auction, Reconfiguration Auction, or bilateral transaction through which the Interconnection Customer received a Capacity Supply Obligation to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request. The re-study shall include those CNR Interconnection Service or CNI Interconnection Service Interconnection Requests with a higher Queue Position that cleared and shall exclude any upgrades that are no longer necessary as a result of existing capacity that will be retired as of the start of the Capacity Commitment Period for which the resource has received a Capacity Supply Obligation. With respect to (iv) above, if an Interconnection Study Agreement has been executed, the Interconnection Study associated with the Interconnection Study Agreement shall include the necessary analysis that would otherwise have been performed in a re-study. If the original Interconnection Study is complete and the final invoice has been issued, the re-study shall

be performed under a new Interconnection Study Agreement. If an LGIA has been either executed or filed with the Commission in unexecuted form, then the last Interconnection Study completed for the Interconnection Customer under this LGIP shall be subject to re-study. The Appendices to the LGIA shall be amended (pursuant to Article 30 of the LGIA) to reflect CNR Capability and the results of the re-study.

### **3.2.2 Network Resource Interconnection Service**

#### **3.2.2.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which Network Resources are interconnected under the NC Interconnection Standard. NR Interconnection Service allows the Interconnection Customer's Large Generating Facility to participate in the New England Markets, in accordance with the provisions of Market Rule 1, Section III of the Tariff, up to the net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as other Network Resources. Notwithstanding the above, the portion of a Large Generating Facility that has been designated as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNR Interconnection Service.

#### **3.2.2.2 The Studies.**

The Interconnection Studies for an Network Resource shall assure that the Interconnection Customer's Large Generating Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the unit, in accordance with the NC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as

appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

### **3.2.2.3 Milestones for NR Interconnection Service.**

An Interconnection Customer with an Interconnection Request for NR Interconnection Service shall complete the requirements in this LGIP prior to receiving NR Interconnection Service.

## **3.2.3 Long Lead Time Facility Treatment**

### **3.2.3.1 Treatment of Long Lead Facilities.**

Long Lead Facilities receive the treatment described herein in connection with the associated request of the Interconnection Customer for CNR Interconnection Service for its Large Generating Facility or CNI Interconnection Service for its External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility. Long Lead Facility treatment provides for the Interconnection Customer's Generating Facility or controllable Merchant Transmission Facility or Other Transmission Facility External ETU, after the completion of the Interconnection System Impact Study, to be modeled in the Base Cases for the next CNR Group Study to determine whether the Long Lead Facility would have qualified or enabled the qualification of an Import Capacity Resource to participate in the Forward Capacity Auction associated with that CNR Group Study, in accordance with Section III.13.1.2 of the Tariff, but for the Long Lead Facility's development cycle (which shall include development of required transmission upgrades). If the Long Lead Facility is deemed to qualify or have enabled an associated Import Capacity Resource to qualify, the Long Lead Facility shall be included in the re-study pursuant to Section 3.2.1.3(iv) in order to determine the facilities and upgrades that would be necessary in order to accommodate the Interconnection Request of the Long Lead Facility, and for which costs the Interconnection Customer must be responsible. In order to maintain Long Lead Facility status, the Interconnection Customer must commit to the completion of these facilities and upgrades in time to allow the Long Lead Facility to achieve its Commercial Operation Date by the start of the associated Capacity Commitment Period. In addition, the Long Lead Facility will be treated as a New Generating Capacity Resource in the case of a Generating Facility or as if an Import Capacity Resource associated with the Long Lead Facility cleared in the case of an External ETU for the sole purpose of inclusion of the Long Lead Facility in the CNR Group Studies for the Forward Capacity Auctions that precede the Forward Capacity Auction for the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation. If an earlier-queued Generating Facility seeking CNR

Interconnection Service or an Import Capacity Resource associated with an Elective Transmission Upgrade that is seeking CNI Interconnection Service obtains a Capacity Supply Obligation in a Forward Capacity Auction prior to or simultaneous with the Forward Capacity Auction in which the Long Lead Facility or its contractual counterparty in the case of an Elective Transmission Upgrade obtains a Capacity Supply Obligation, the Long Lead Facility will be re-studied in order to determine whether any additional facilities and upgrades to those identified prior to the CNR Group Study must be completed, at the Interconnection Customer's cost, prior to its Commercial Operation Date. A Long Lead Facility's cost responsibility for the facilities necessary to accommodate the Interconnection Request shall not be impacted by a Generating Facility or an External ETU with a Queue Position lower than the Long Lead Facility or its counterparty in the case of an External ETU that clears in a Forward Capacity Auction, in accordance with Section III.13.2 of the Tariff, prior to the clearance of the Long Lead Facility.

#### **3.2.3.2 Request for Long Lead Facility Treatment.**

An Interconnection Customer requesting CNR Interconnection Service for its proposed Generating Facility or CNI Interconnection Service for its proposed controllable Merchant Transmission Facility or Other Transmission Facility External ETU, which the Interconnection Customer projects to have a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) may elect or request Long Lead Facility treatment in the following manner:

(a) An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service equal to or greater than 100 MW may elect Long Lead Facility treatment at the time the Interconnection Request is submitted, together with the critical path schedule and deposits required in Section 3.2.3.3.

(b) An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service under 100 MW may request Long Lead Facility treatment by submitting a written request to the System Operator for its review and approval, explaining why the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU cannot achieve Commercial Operation by the beginning of the Capacity Commitment Period associated with the next Forward Capacity

Auction (after the election for Long Lead Facility treatment is made), together with the critical path schedule and deposits required in Section 3.2.3.3. In reviewing the request, the System Operator shall evaluate the feasibility of the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU achieving Commercial Operation to meet an earlier Capacity Commitment Period based on the information provided in the request and the critical path schedule submitted pursuant to Section 3.2.3.3, in a manner similar to that performed under Section III.13.3.2 of the Tariff. Within forty-five (45) Business Days after its receipt of the request for Long Lead Facility treatment, the System Operator shall notify the Interconnection Customer in writing whether the request has been granted or denied. If the System Operator determines that the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU can achieve a Commercial Operation Date prior to the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction, the Interconnection Customer's request shall be denied. The dispute resolution provisions of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU are not available for disputes or claims associated with the ISO's determination to deny an Interconnection Customer's request for Long Lead Facility treatment.

(c) An Interconnection Customer that did not request Long Lead Facility treatment at the time the Interconnection Request was submitted, may thereafter submit a request for treatment as a Long Lead Facility, together with the critical path schedule and deposits required in Section 3.2.3.3 and, if applicable, a request for an extension of the Commercial Operation Date specified in the Interconnection Request in accordance with Sections 4.4.4 and 4.4.5. A request for Long Lead Facility treatment that is submitted after the initial Interconnection Request will not be eligible to participate in any Forward Capacity Auction prior to the Forward Capacity Auction associated with the extended Commercial Operation Date. The Long Lead Facility will be modeled in the Base Cases for the CNR Study Group associated with the near term Forward Capacity Auction unless that CNR Study Group is underway, in which case the Long Lead Facility will be modeled in the next CNR Study Group.

### **3.2.3.3 Critical Path Schedule and Deposits for Long Lead Facility Treatment.**

At the time an Interconnection Customer submits an election or request for Long Lead Facility treatment, the Interconnection Customer must submit, together with the request:

**(1) Critical Path Schedule.** A critical path schedule, in writing, for the Long Lead Facility (with a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) that meets the requirements set forth in Section III.13.1.1.2.2.2 of the Tariff. The Interconnection Customer must submit annually, in writing, an updated critical path schedule to the System Operator by the closing deadline of each New Capacity Show of Interest Submission Window that precedes the Forward Capacity Auction associated with the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation, prior to the inclusion of the Long Lead Facility in the Base Case for the CNR Group Study associated with the corresponding New Capacity Show of Interest Submission Window. With its annual update, for each critical path schedule milestone achieved since the submission of the previous critical path schedule update, the Interconnection Customer must include in the critical path update documentation demonstrating that the milestone has been achieved by the date indicated and as otherwise described in the critical path schedule.

**(2) Long Lead Facility Deposits.**

**(a) Deposits.** In addition to the deposits required elsewhere in the LGIP in the case of a Generating Facility or the ETU IP for External ETU, at the time of its request for Long Lead Facility treatment, in accordance with Section 3.2.3.3, and by each deadline for which a New Generating Capacity Resource is required to provide financial assurance under Section III.13.1.9.1 of the Tariff, the Interconnection Customer must provide a separate deposit in the amount of  $0.25 * (\text{Forward Capacity Auction Starting Price } (\$/\text{kW-mo}) / 2) * \text{requested CNR Capability or CNI Capability}$ . For each calculation of the deposit, the System Operator shall use the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction at the time of that calculation, pursuant to Section III.13.2.4 of the Tariff, or the Forward Capacity Auction Starting Price for the previous Forward Capacity Auction in the case where the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction has not yet been calculated. The total amount of deposits shall not exceed the Non-Commercial Capacity Financial Assurance Amount that the Long Lead Facility would be required to provide if the Long Lead Facility or its counterparty cleared in the upcoming Forward Capacity Auction, in accordance with Section III.13.1.9.1 of the Tariff. The Long Lead Facility deposits will be fully refunded (with interest to be calculated in accordance with Section 3.7) (i) if the



Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within thirty (30) Calendar Days of the Scoping Meeting or of the completion of the System Impact Study (including restudy of the System Impact Study), pursuant to Section 7, or (ii) once the Long Lead Facility or its counterparty clears in a Forward Capacity Auction.

**(b) Reductions.** Ten (10) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) after the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear in the Forward Capacity Auction that follows the first Forward Capacity Auction for which the Long Lead Facility or its counterparty could qualify based on the Commercial Operation Date specified in the initial critical path schedule for the Long Lead Facility. An additional five (5) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) following each subsequent Forward Capacity Auction in which the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear such Forward Capacity Auction, not to exceed the maximum period allowed under Sections 3.4.1, 4.4.4 and 4.4.5. The non-refundable portions of the deposits shall be credited to the revenue requirements under Schedule 1 of Section IV of the Tariff.

#### **3.2.3.4 Withdrawal and Refunds After Expenditures for Upgrades.**

An Interconnection Customer that provides documentation in the critical path schedule update to be submitted in accordance with Section 3.2.3.3(1), showing expenditures of the required amounts for upgrades identified in the Interconnection Studies for the Long Lead Facility, may submit a withdrawal of the Interconnection Request for the Long Lead Facility, in accordance with Section 3.7, at any time up to thirty (30) Calendar Days, after the Long Lead Facility's or its counterparty's failure to clear in any Forward Capacity Auction. In such instance, the Interconnection Customer shall receive a refund from the System Operator of the Long Lead Facility deposits (with interest to be calculated in accordance with Section 3.7) as adjusted pursuant to 3.2.3.3(2), if appropriate, and from the Interconnecting Transmission Owner a refund of the payments for the upgrades that exceed the costs incurred by the Interconnecting Transmission Owner. If the Interconnection Customer withdraws only its election or request for Long Lead Facility treatment, such withdrawal will be considered a Material Modification and the Long Lead Facility will lose its Queue Position unless its withdrawal occurs within one of the thirty (30)-day periods

described in Section 3.2.3.3(2) of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU.

#### **3.2.3.5 Additional Requirements to Maintain Long Lead Facility Treatment.**

An Interconnection Customer with a Long Lead Facility must begin payment as required by the transmission expenditure schedule for the transmission upgrade costs that have been identified in the pertinent Interconnection Studies. The Interconnection Request for CNR Interconnection Service shall be deemed withdrawn under Section 3.7 if the Interconnection Customer fails to comply with the requirements for Long Lead Facility treatment, including the milestones specified in Section 3.2.1.4. In this circumstance, the conditions specified in an Interconnection Agreement for a Generating Facility seeking CNR Interconnection Service or External ETU seeking CNI Interconnection Service that had an Interconnection Request of a Queue Position lower than the Long Lead Facility, but cleared (in the case of the Elective Transmission Upgrade, the Import Capacity Resource) in a Forward Capacity Auction prior to the Long Lead Facility, shall be removed.

#### **3.2.3.6 Participation in Earlier Forward Capacity Auctions.**

An Interconnection Customer with a Long Lead Facility may, without loss of Queue Position, elect to participate in an earlier Forward Capacity Auction than originally anticipated, but only if the election to accelerate is made to the System Operator in writing within thirty (30) Calendar Days of the Scoping Meeting or within thirty (30) Calendar Days of the completion of the System Impact Study (but before the Long Lead Facility and the results of the associated System Impact Study are incorporated into the Base Cases). Otherwise, such an election shall be considered a Material Modification.

### **3.3 Utilization of Surplus Interconnection Service.**

Surplus Interconnection Service allows an existing Interconnection Customer whose Generating Facility is already interconnected to the Administered Transmission System and is in Commercial Operation to utilize or transfer Surplus Interconnection Service at the existing Generating Facility's existing Point of Interconnection. For purposes of Surplus Interconnection Service, the existing Interconnection Customer is referred to as the "Original Interconnection Customer," and the entity requesting Surplus Interconnection Service is referred to as the "Surplus Interconnection Customer." The Original Interconnection Customer or, with written consent of the Original Interconnection Customer, one of its affiliates shall have priority to utilize Surplus Interconnection Service. If the Original Interconnection Customer or one of its affiliates does not

exercise this priority, then the Surplus Interconnection Service may be utilized by a third party of the Original Interconnection Customer's choosing and with the Original Interconnection Customer's written consent.

Surplus Interconnection Service may be available for any Unused Capability of Interconnection Service established in the Interconnection Agreement for the Original Interconnection Customer's Generating Facility. If the Interconnection Agreement for the Original Interconnection Customer's Generating Facility is for CNR Interconnection Service, any Surplus Interconnection Service may be for CNR Interconnection Service or NR Interconnection Service. If the Interconnection Agreement for the Original Interconnection Customer's Generating Facility is for NR Interconnection Service, any Surplus Interconnection Service shall be for NR Interconnection Service. Surplus Interconnection Service is not applicable when a new Interconnection Request for Interconnection Service or Network Upgrades would be required to implement the proposed change to the Original Interconnection Customer's Generating Facility. Surplus Interconnection Service is also not available for a retirement or repowering of the Original Interconnection Customer's Generating Facility.

The Original Interconnection Customer shall specify the amount of Unused Capability that is available for use by the Surplus Interconnection Customer's Generating Facility. The total output of the Original Interconnection Customer's Generating Facility plus the Surplus Interconnection Customer's Generating Facility behind the same Point of Interconnection shall be limited to the maximum total amount of Interconnection Service granted to the Original Interconnection Customer as established in the Interconnection Agreement for the Original Interconnection Customer's Generating Facility. Control technology to restrict the total output of the Original Interconnection Customer's and Surplus Interconnection Customer's Generating Facilities shall be required in the case where the sum of the maximum output of the Original Interconnection Customer's Generating Facility plus the maximum output of the Surplus Interconnection Customer's Generating Facility exceeds the total amount of Interconnection Service established in the Original Interconnection Customer's Interconnection Agreement. Surplus Interconnection Service shall only be available at the existing Point of Interconnection of the Original Interconnection Customer's Generating Facility.

### **3.3.1 Surplus Interconnection Service Request**

An Original Interconnection Customer or, with the consent of the Original Interconnection Customer, its affiliate or a third party of the Original Interconnection Customer's choosing may request Surplus Interconnection Service by submitting to the System Operator a completed Surplus Interconnection Service Request Application in the form contained in Attachment C to Appendix 1 of the LGIP. The Surplus Interconnection Service Request Application shall be accompanied by the Original Interconnection Customer's written consent for the Surplus Interconnection Customer's use of Unused Capability for Surplus Interconnection Service, and the technical data called for in the form.

Studies for Surplus Interconnection Service may consist of reactive power, short circuit/fault duty, stability analyses, and/or other appropriate studies. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied. The study shall consider the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the total output of the Original Interconnection Customer's and Surplus Interconnection Customer's Generating Facilities. If the Surplus Interconnection Service was not studied under off-peak conditions, off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. If the original Interconnection System Impact Study is not available for Surplus Interconnection Service, both off-peak and peak analysis may need to be performed for the existing Generating Facility associated with the request for Surplus Interconnection Service. The reactive power, short circuit/fault duty, stability, and steady-state analyses for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary. Any analyses shall be performed at the Surplus Interconnection Customer's expense.

The Interconnection Agreement for the Original Interconnection Customer's Generating Facility shall be replaced by a new agreement among the System Operator, Interconnecting Transmission Owner, Original Interconnection Customer, and Surplus Interconnection Customer. The agreement shall be in the form of the most currently effective LGIA, modified to reflect the Surplus Interconnection Customer's Generating Facility and the amount of, and the terms for the use of, the Surplus Interconnection Service. The agreement shall be developed and negotiated in accordance with Section 11 of the LGIP, at the Surplus Interconnection Customer's expense.

### **3.4 Valid Interconnection Request.**

### **3.4.1 Initiating an Interconnection Request.**

To initiate and establish a valid Interconnection Request, Interconnection Customer must submit all of the following to the System Operator in the manner specified in Appendix 1 Interconnection Request to this LGIP: (i) an initial deposit of \$50,000, (ii) a completed application in the form of Appendix 1, (iii) all information and deposits required under Section 3.2, and (iv) in the case of a request for CNR Interconnection Service, demonstration of Site Control or, in the case of a request for NR Interconnection Service, demonstration of Site Control or a posting of an additional deposit of \$10,000. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Large Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. The portions of the deposit of \$50,000 that have not been applied as provided in this Section 3.4.1 shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry Deadline, (iii) the Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in relative order with any other Interconnection Request also requesting to be re-queued pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit of \$50,000 (and any study-related deposits, if any have been submitted) shall be applied toward the re-queued Interconnection Request's initial deposit of \$50,000 and any remaining balance will be refunded, or (iv) if the Interconnection Customer executes an LGIA. Otherwise, any unused balance of the deposit of \$50,000 shall be non-refundable and applied on a pro-rata basis to offset costs incurred by Interconnection Customers with lower Queue Positions that are subject to re-study, as determined by the System Operator in accordance with the provisions of this LGIP, as a result of the withdrawal of an Interconnection Request with a higher Queue Position.

The deposit of \$50,000 shall be applied toward the costs incurred by the System Operator associated with the Interconnection Request and Long Lead Facility treatment, as well as, the costs of the Interconnection Feasibility Study and/or the Interconnection System Impact Study, including the cost of developing the study agreements and their attachments, and the cost of developing the LGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K,

Section II of the Tariff, the deposit of \$50,000 also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS.

If, in the case of a request for NR Interconnection Service, the Interconnection Customer demonstrates Site Control within the cure period specified in Section 3.4.3 after submitting its Interconnection Request, the additional deposit of \$10,000 shall be refundable; otherwise, that deposit shall be applied as provided in Section 3.1, including, toward the costs of any Interconnection Studies pursuant to the Interconnection Request, the cost of developing the study agreement(s) and associated attachment(s), and the cost of developing the LGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. The portions of the deposit of \$10,000 that have not been applied as provided in this Section 3.4.1 also shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry Deadline, (iii) the Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit shall be applied toward the re-queued Interconnection Request in lieu of Site Control for NR Interconnection Service, or (iv) if the Interconnection Customer executes an LGIA.

The expected Initial Synchronization Date of the new Large Generating Facility, of the increase in capacity of the existing Generating Facility, or of the implementation of the Material Modification to the existing Generating Facility shall not exceed seven (7) years from the date the Interconnection Request is received by the System Operator, unless the Interconnection Customer demonstrates that such time required to actively engineer, permit and construct the new Large Generating Facility or increase in capacity of the existing Generating Facility or implement the Material Modification to the existing Generating Facility will take longer than the seven year period. Upon such demonstration, the Initial Synchronization Date may succeed the date the Interconnection Request is received by the System Operator by a period of greater than seven (7) years so long as the Interconnection Customer, System Operator, and Interconnecting Transmission Owner agree, such agreement shall not be unreasonably withheld.

#### **3.4.2 Acknowledgment of Interconnection Request.**

System Operator shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgement. With the System Operator's acknowledgement of a valid Interconnection Request, the System Operator shall provide to the Interconnection Customer an Interconnection Feasibility Study Agreement in the form of Appendix 2 or an Interconnection System Impact Study Agreement in the form of Appendix 3.

#### **3.4.3 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid Interconnection Request until all items in Section 3.4.1 have been received by the System Operator. If an Interconnection Request fails to meet the requirements set forth in Section 3.4.1, the System Operator shall notify the Interconnection Customer within five (5) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide the System Operator the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Section 3.4.3 shall be treated in accordance with Section 3.7.

#### **3.4.4 Scoping Meeting.**

Within ten (10) Business Days after receipt of a valid Interconnection Request, System Operator shall establish a date agreeable to Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, for a Scoping Meeting, and such date shall be no later than thirty (30) Calendar Days from receipt of the valid Interconnection Request, unless otherwise mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be (i) to discuss the estimated timeline for completing all applicable Interconnection Studies, and alternative interconnection options, (ii) to exchange pertinent information including any transmission data that would reasonably be expected to impact such interconnection options, (iii) to analyze such information, (iv) to determine the potential feasible Points of Interconnection, and (v) to discuss any other information necessary to facilitate the administration of the Interconnection Procedures. A PSCAD model is required for all wind and inverter-based Large Generating Facilities. If a PSCAD model is required for other Large Generating Facility types, the Parties

shall discuss this at the Scoping Meeting. If the Interconnection Customer provided the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) with the Interconnection Request, the Parties shall discuss the detailed project design at the Scoping Meeting.

The Parties will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) information regarding general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. The Parties will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 6.1, and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

Unless the Interconnection Request has been identified to be included in a CRPS or eligible for inclusion in a CSIS, within five (5) Business Days following the Scoping Meeting Interconnection Customer shall notify the System Operator, in writing, (i) of its election to pursue the Interconnection Feasibility Study or the Interconnection System Impact Study; (ii) if electing to pursue the Interconnection Feasibility Study, which of the alternate study scopes is being selected pursuant to Section 6.2; and (iii) the Point of Interconnection and any reasonable alternative Point(s) of Interconnection for inclusion in the attachment to the Interconnection Feasibility Study Agreement, or the Point of Interconnection for inclusion in the attachment to the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

### **3.5 OASIS Posting.**

#### **3.5.1**

The System Operator will maintain on its OASIS a list of all Interconnection Requests in its Control Area. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected Initial Synchronization Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of Interconnection Service being requested (i.e., CNR Interconnection Service or NR Interconnection Service); and (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection



Request; (ix) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the System Operator and Interconnecting Transmission Owner jointly file an unexecuted LGIA with the Commission. Before participating in a Scoping Meeting with an Interconnection Customer that is also an Affiliate, the Interconnecting Transmission Owner shall post on OASIS an advance notice of its intent to do so. The System Operator shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Study reports shall be posted to the System Operator's OASIS site subsequent to the meeting between the System Operator, Interconnecting Transmission Owner, and Interconnection Customer to discuss the applicable study results. The System Operator shall also post any known deviations in the Large Generating Facility's Initial Synchronization Date.

### **3.5.2 Requirements to Post Interconnection Study Metrics**

The System Operator will maintain on its website summary statistics related to processing Interconnection Studies pursuant to Interconnection Requests, updated quarterly. If the System Operator posts this information on its website, a link to the information must be provided on the System Operator's OASIS site. For each calendar quarter, the System Operator must calculate and post the information detailed in Sections 3.5.2.1 through 3.5.2.4.

#### **3.5.2.1 Interconnection Feasibility Studies Processing Time.**

(A) Number of Interconnection Requests that had Interconnection Feasibility Studies completed for the System Operator's Administered Transmission System during the reporting quarter,

(B) Number of Interconnection Requests that had Interconnection Feasibility Studies completed for the System Operator's Administered Transmission System during the reporting quarter that were completed more than ninety (90) Calendar Days after receipt by System Operator of the Interconnection Customer's executed Interconnection Feasibility Study Agreement,

(C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Interconnection Feasibility Studies where such Interconnection Requests had

executed Interconnection Feasibility Study Agreements received by System Operator more than ninety (90) Calendar Days before the reporting quarter end,

(D) Mean time (in days), Interconnection Feasibility Studies completed for the System Operator's Administered Transmission System during the reporting quarter, from the date when System Operator received the executed Interconnection Feasibility Study Agreement to the date when System Operator provided the completed Interconnection Feasibility Study to the Interconnection Customer,

(E) Percentage of Interconnection Feasibility Studies exceeding ninety (90) Calendar Days to complete this reporting quarter, calculated as the sum of 3.5.2.1(B) plus 3.5.2.1(C) divided by the sum of 3.5.2.1(A) plus 3.5.2.1(C).

#### **3.5.2.2 Interconnection System Impact Studies Processing Time.**

(A) Number of Interconnection Requests that had Interconnection System Impact Studies completed for the System Operator's Administered Transmission System during the reporting quarter,

(B) Number of Interconnection Requests that had Interconnection System Impact Studies completed for the System Operator's Administered Transmission System during the reporting quarter that were completed more than two hundred and seventy (270) Calendar Days after receipt by System Operator of the Interconnection Customer's executed Interconnection System Impact Study Agreement,

(C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete System Impact Studies where such Interconnection Requests had executed Interconnection System Impact Study Agreements received by System Operator more than two hundred and seventy (270) Calendar Days before the reporting quarter end,

(D) Mean time (in days), Interconnection System Impact Studies completed for the System Operator's Administered Transmission System during the reporting quarter, from the date when System Operator received the executed Interconnection System Impact Study Agreement to the

date when System Operator provided the completed Interconnection System Impact Study to the Interconnection Customer,

(E) Percentage of Interconnection System Impact Studies exceeding two hundred and seventy (270) Calendar Days to complete this reporting quarter, calculated as the sum of 3.5.2.2(B) plus 3.5.2.2(C) divided by the sum of 3.5.2.2(A) plus 3.5.2.2(C).

### **3.5.2.3 Interconnection Facilities Studies Processing Time.**

(A) Number of Interconnection Requests that had Interconnection Facilities Studies that are completed for the System Operator's Administered Transmission System during the reporting quarter,

(B) Number of Interconnection Requests that had Interconnection Facilities Studies that are completed for the System Operator's Administered Transmission System during the reporting quarter that were completed more than ninety (90) Calendar Days for no more than +/- 20 percent cost estimate or one hundred eighty (180) Calendar Days for +/- 10 percent cost estimate after receipt by System Operator of the Interconnection Customer's executed Interconnection Facilities Study Agreement,

(C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Interconnection Facilities Studies where such Interconnection Requests had executed Interconnection Facilities Studies Agreement received by System Operator more than ninety (90) Calendar Days for no more than +/- 20 percent cost estimate or one hundred eighty (180) Calendar Days for +/- 10 percent cost estimate before the reporting quarter end,

(D) Mean time (in days), for Interconnection Facilities Studies completed for the System Operator's Administered Transmission System during the reporting quarter, calculated from the date when System Operator received the executed Interconnection Facilities Study Agreement to the date when System Operator provided the completed Interconnection Facilities Study to the Interconnection Customer,

(E) Percentage of delayed Interconnection Facilities Studies this reporting quarter, calculated as

the sum of 3.5.2.3(B) plus 3.5.2.3(C) divided by the sum of 3.5.2.3(A) plus 3.5.2.3(C).

#### **3.5.2.4 Interconnection Requests Withdrawn from Interconnection Queue.**

(A) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter,

(B) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter before completion of any Interconnection Studies or execution of any Interconnection Study Agreements,

(C) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter before completion of an Interconnection System Impact Study,

(D) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter before completion of an Interconnection Facility Study,

(E) Number of Interconnection Requests withdrawn from System Operator's interconnection queue after execution of an LGIA or Interconnection Customer requests the filing of an unexecuted LGIA,

(F) Mean time (in days), for all withdrawn Interconnection Requests, from the date when the request was determined to be valid to when System Operator received the request to withdraw from the queue.

3.5.3 System Operator is required to post on its website the measures in paragraph 3.5.2.1(A) through paragraph 3.5.2.4(F) for each calendar quarter within 30 days of the end of the calendar quarter. System Operator will keep the quarterly measures posted on its website for three calendar years with the first required report to be the first quarter of 2020. If System Operator retains this information on its website, a link to the information must be provided on System Operator's OASIS site.

3.5.4 In the event that any of the values calculated in paragraphs 3.5.2.1(E), 3.5.2.2(E) or

3.5.2.3(E) exceeds 25 percent for two consecutive calendar quarters, System Operator will have to comply with the measures below for the next four consecutive calendar quarters and must continue reporting this information until System Operator reports four consecutive calendar quarters without the values calculated in 3.5.2.1(E), 3.5.2.2(E) or 3.5.2.3(E) exceeding 25 percent for two consecutive calendar quarters:

(i) System Operator must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline (*i.e.*, 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts). System Operator must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the calendar quarter.

(ii) System Operator shall aggregate the total number of employee hours and third party consultant hours expended towards Interconnection Studies for its Administered Transmission System that quarter and post on its website. If System Operator posts this information on its website, a link to the information must be provided on System Operator's OASIS site. This information is to be posted within 30 days of the end of the calendar quarter.

### **3.6 Coordination with Affected Systems.**

The System Operator will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected Parties and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. The System Operator will include such Affected Parties in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the System Operator and Interconnecting Transmission Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. The Interconnection Customer shall be responsible for the costs associated with the studies or portions of studies associated with the Affected Systems. Payment and refunds associated with the costs of such studies will be coordinated between the Interconnection Customer and the Affected Party(ies) unless such costs are included in the costs of the Interconnection Study, in which case, the Affected Party(ies) shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the respective Interconnection Study each month and shall include in such invoices all employee hours

and third party consultant hours, including subcontractor hours, expended toward the Interconnection Studies.

The System Operator shall seek the cooperation of all Affected Parties in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Nothing in the foregoing is intended to authorize the Interconnection Customer to receive interconnection, related facilities or other services on an Affected System, and provision of such services must be handled through separate arrangements with Affected Party(ies).

### **3.7 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to System Operator, which System Operator will transmit to Interconnecting Transmission Owner and any Affected Parties. In addition, if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in Section 13.5 (Disputes), the System Operator shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Except as otherwise provided elsewhere in this LGIP, upon receipt of such written notice, the Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the deficiency or to notify the System Operator of its intent to pursue Dispute Resolution, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, the System Operator may eliminate the Interconnection Customer's Interconnection Request from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to System Operator, Interconnecting Transmission Owner, and any Affected Parties all costs prudently incurred with respect to that Interconnection Request prior to System Operator's receipt of notice described above. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

The System Operator shall update the OASIS Queue Position posting. Except as otherwise provided elsewhere in this LGIP, the System Operator and the Interconnecting Transmission Owner shall arrange to refund to the Interconnection Customer any portion of the Interconnection Customer's deposit or study payments that exceeds the costs incurred, including interest calculated in accordance with section 35.19a(a)(2) of the Commission's regulations, or arrange to charge to the Interconnection Customer any amount of such costs incurred that exceed the Interconnection Customer's deposit or study payments, including interest calculated in accordance with section 35.19a(a)(2) of the Commission's regulations. In the event of such withdrawal, System Operator, subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information, shall provide, at Interconnection Customer's request, all information developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.8 Identification of Contingent Facilities.**

System Operator shall identify Contingent Facilities before the execution of the LGIA by reviewing the Interconnection Facilities and Network Upgrades associated with an Interconnection Request with a higher Queue Position or the list of transmission projects planned or proposed for the New England Transmission System to identify those upgrades that are not yet in service but upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing. Planned or proposed upgrades will be identified as Contingent Facilities for an Interconnection Request if the absence of those upgrades would cause additional Adverse System Impacts to be identified in the System Impact Study, using the same conditions as those used in the System Impact Study. The thresholds for identification of Adverse System Impact for the purpose of identifying Contingent Facilities will be as follows: (i) an increase in the flow in an element by at least two percent of the element's rating and that causes that flow to exceed that element's appropriate thermal rating by more than two percent where the appropriate thermal rating is the normal rating with all lines in service and the long time emergency or short time emergency rating after a contingency; (ii) a change of at least one percent in a voltage that causes a voltage level that is higher or lower than the appropriate high or low rating by more than one percent; (iii) an increase of at least a one percent change in the short circuit current experienced by an element and that causes a short circuit stress that is higher than an element's interrupting or withstand capability; or (iv) the introduction of a violation

of stability criteria. Contingent Facilities that are identified during the evaluation of the Interconnection Request shall be documented in the Interconnection System Impact Study report or the LGIA for the Large Generating Facility. System Operator shall also provide, upon request of the Interconnection Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service completion time for each identified Contingent Facilities when this information is readily available and not commercially sensitive.

## **SECTION 4. QUEUE POSITION.**

### **4.1 General.**

System Operator shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form in Appendix 1 to this LGIP, and Interconnection Customer provides such information in accordance with Section 3.4.3, then System Operator shall assign Interconnection Customer a Queue Position based on the date the application form was originally submitted.

Except as otherwise provided in this Section 4.1, the Queue Position of each Interconnection Request will be used to determine: (i) the order of performing the Interconnection Studies; (ii) the order in which Interconnection Requests will be eligible for inclusion in the CSIS and CFAC; (iii) the order in which Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service will be included in the CNR Group Study; and (iv) the cost responsibility for the facilities and upgrades necessary to accommodate the Interconnection Request. A higher queued Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued.

A CSIS and CFAC shall include the Interconnection Requests that were identified as eligible to participate in the CSIS and CFAC and met the associated requirements for inclusion in said studies in accordance with Section 4.2 of this LGIP. An Interconnection Request included in a cluster shall consider a higher queued Interconnection Request not included in the cluster. A lower queued Interconnection Request that is not included in the cluster shall consider all of the higher queued Interconnection Requests that are part of the cluster.



#### **4.1.1 Order of Interconnection Requests in the CNR Group Study**

Participation in a CNR Group Study shall be a prerequisite to achieve CNR Interconnection Service and CNI Interconnection Service. The CNR Group Study (to be conducted in accordance with Section III.13.1.1.2.3 of the Tariff) shall include all Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service that have an associated New Capacity Show of Interest Form that was submitted during the New Capacity Show of Interest Submission Window for the purpose of qualification for participation in the same Forward Capacity Auction for a Capacity Commitment Period, in accordance with Section III.13.1.1.2 of the Tariff, as well as Long Lead Facilities in accordance with Section 3.2.3. Where a CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a lower Queue Position is associated with a New Capacity Show of Interest Form that was submitted for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and another CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a higher Queue Position is not associated with a New Capacity Show of Interest Form that was submitted for qualification until a subsequent Forward Capacity Auction, the CNR Interconnection Service or CNI Interconnection Service Interconnection Request with the lower Queue Position will be included in the CNR Group Study prior to the CNR Interconnection Service or the CNI Interconnection Service Interconnection Request with the higher Queue Position.

However, where an Interconnection Customer with a CNR Interconnection Service Interconnection Request submits a New Capacity Show of Interest Form for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and identifies in that New Capacity Show of Interest Form one or more Elective Transmission Upgrade Interconnection Request(s) for an Internal ETU that is not already included in the network model pursuant to Section III.12 of the Tariff for the particular Forward Capacity Auction, the CNR Interconnection Request will be included in the CNR Group Study at the lowest of the CNR Interconnection Request's or its associated Elective Transmission Upgrade Interconnection Request(s) for the Internal ETU's Queue Position. Where multiple Interconnection Customers' CNR Interconnection Service Interconnection Requests are associated with the same lower Queue Position for an Elective Transmission Upgrade Interconnection Request for an Internal ETU in the CNR Group Study, the CNR Interconnection Request's Queue Position will be used as the tie breaker to dictate the relative order in which the CNR Interconnection Service Interconnection Request will be included in the CNR Group Study.

An Interconnection Customer with a Generating Facility or that is associated with an Import Capacity Resource in the case of an Elective Transmission Upgrade that is treated as a Conditional Qualified New Resource, in accordance with Section III.13.1.1.2.3(f) of the Tariff, may be responsible for the facilities and upgrades associated with an overlapping CNR Interconnection Service or CNI Interconnection Service Interconnection Request having a higher Queue Position if the Conditional Qualified New Resource obtains a Capacity Supply Obligation through a Forward Capacity Auction under Section III.13.2.5 of the Tariff.

An Interconnection Customer with a lower queued CNR Interconnection Service Interconnection Request for a Generating Facility or CNI Interconnection Service Interconnection Request for an Elective Transmission Upgrade that has achieved Commercial Operation and obtained CNR Interconnection Service or CNI Interconnection Service, respectively, may be responsible for additional facilities and upgrades if the related higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively. In such circumstance, Appendix A to the Interconnection Agreement for the lower queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request shall specify the facilities and upgrades for which the Interconnection Customer shall be responsible if the higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively.

Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates). Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed

Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates). Interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates that have not yet received the System Operator's approval for their Proposed Plan Applications under Section I.3.9 of the Tariff at the commencement of the CNR Group Study shall be included in the CNR Group Study after all Interconnection Requests submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and all interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff have been included in the CNR Group Study in order of submission to the Interconnecting Transmission Owners or their distribution company affiliates.

## **4.2 Clustering.**

Clustering Interconnection Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable Regional System Plan in light of the New England Transmission System's capabilities for the time period under study. The System Operator may study an Interconnection Request serially to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility.

### **4.2.1 Triggers for Studying Interconnection Requests in Clusters.**

At the discretion of the System Operator, Interconnection Requests will be studied in clusters for the purpose of the Interconnection System Impact Study and the Interconnection Facilities Study when the combination of the following circumstances is present in the interconnection queue: (a) there are two (2) or more Interconnection Requests without completed Interconnection System Impact Studies in the same electrical part of the New England Control Area based on the requested Point of Interconnection, and (b) the System Operator determined that none of the Interconnection Requests identified in (a) of this Section 4.2.1 will be able to interconnect, either individually or on a cluster basis, without the use of common significant new transmission line infrastructure rated at or above 115 kV AC or HVDC.

### **4.2.2 Notice of Initiation of Cluster Studies.**

When the combination of the triggers specified in Section 4.2.1 of this LGIP are present in the interconnection queue, the System Operator will provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff. The System Operator also will provide notice to the Interconnection Customers with Interconnection Requests identified in Section 4.2.1 of this LGIP, and at the time the System Operator notifies the Planning Advisory Committee of the initiation of a cluster, all study work for these Interconnection Requests will be suspended and they will proceed under Section 4.2 of this LGIP. The System Operator will conduct Clustering in two phases. In the first phase, the System Operator will perform a CRPS to identify the CETU and associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests considered in Section 4.2.1 of this LGIP, consistent with Section 15.2 of Attachment K. In the second phase, the System Operator will conduct a CSIS and a CFAC to study the Interconnection Requests identified through the CRPS that have elected to participate in the CSIS together with the identified CETU and associated system upgrades, in accordance with this LGIP.

Within sixty (60) Calendar Days of the System Operator's notice to the Planning Advisory Committee of the initiation of the use of Clustering for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff, Interconnection Customers with Interconnection Requests identified in Section 4.2.1 shall submit the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable), to support the conduct of the CRPS.

#### **4.2.3 Cluster Interconnection System Impact Study.**

##### **4.2.3.1 Notice of Cluster Interconnection System Impact Study Entry Deadline.**

At the same time the System Operator issues the final CRPS report to the Planning Advisory Committee in accordance with Section 15.4 of Attachment K, the System Operator will provide notice of the entry deadline for the CSIS (the "Cluster Entry Deadline") to the Interconnection Customers with Interconnection Requests identified in the final CRPS report as eligible to participate in the CSIS. The Cluster Entry Deadline shall be thirty (30) Calendar Days from the posting of the final CRPS report.

##### **4.2.3.2 Cluster Interconnection System Impact Study Entry Requirements.**

All Interconnection Requests identified in the final CRPS report, by Queue Position as assigned in accordance with Section 4.1 of this LGIP, shall be eligible to be studied together in the CSIS.

**4.2.3.2.1 Cluster Entry Deadline Election.** By the Cluster Entry Deadline, an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS must, in writing:

1. withdraw the Interconnection Request, pursuant to Section 3.7;
2. request that the System Operator re-assign the Interconnection Customer's Interconnection Request a new Queue Position at the bottom of the queue as of the Cluster Entry Deadline in relative order with any other Interconnection Requests requesting to be re-queued under this Section 4.2.3.2.1; or
3. request to be included in the CSIS and meet the CSIS entry requirements specified in Section 4.2.3.2.2.

If, by the Cluster Entry Deadline, Interconnection Customer fails to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or request to be included in the CSIS and meet the CSIS entry requirements, then the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If Interconnection Customer elects option (iii) and does not meet all of the CSIS entry requirements specified in Section 4.2.3.2.2 by the Cluster Entry Deadline, the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If an initial Cluster Participation Deposit had been submitted as part of the incomplete CSIS entry requirements submission, the initial Cluster Participation Deposit will be refunded at the time the Interconnection Request is withdrawn.

**4.2.3.2.2 CSIS Entry Requirements.** An Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS that elects option (iii) under Section 4.2.3.2.1 must meet the following CSIS entry requirements in order to be included in the CSIS:

**(1) Cluster System Impact Study Application.** By the Cluster Entry Deadline, Interconnection Customer must submit to the System Operator a completed Cluster System Impact Study Application in the form specified in Appendix 1, Attachment A-2 of this LGIP, requesting the inclusion of the Interconnection Request in the CSIS;

**(2) System Impact Study Agreement, Study Deposit, Technical Data, and Site Control.**

If an Interconnection Feasibility Study Agreement or an Interconnection System Impact Study Agreement has been executed prior to the issuance of the final CRPS report identifying the Interconnection Request as eligible for inclusion in a CSIS, such agreement shall terminate upon execution of a new Interconnection System Impact Study Agreement in accordance with this Section 4.2.3.2.2, and any unused balance of the study deposit associated with the terminated agreement shall be applied toward the study deposit associated with the new Interconnection System Impact Study Agreement.

Within fifteen (15) Business Days following the Cluster Entry Deadline, the System Operator and Interconnecting Transmission Owner will provide to Interconnection Customer an Interconnection System Impact Study Agreement, including a non-binding good faith estimate of the costs and timeframe for commencing and completing the CSIS. The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after receipt along with continued demonstration of Site Control, the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable), and a refundable study deposit, to the extent that any additional study deposit is required, in accordance with Section 7.2 of this LGIP.

**(3) Cluster Participation Deposit for the CSIS.** By the Cluster Entry Deadline, Interconnection Customer also must submit to the System Operator an initial Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CRPS report. If the System Operator subsequently identifies that an Internal ETU has met the requirements to take the place of a CETU, or portion thereof, pursuant to Section 4.2.3.4 of this LGIP, the initial Cluster Participation Deposit will be reduced to exclude the costs associated with the CETU, or portion thereof, that is being replaced by the Internal ETU, and the Interconnection Customer shall be refunded the corresponding amount. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The initial Cluster Participation Deposit will be fully refunded (with interest to be calculated in accordance with Section 3.7 of this LGIP) to Interconnection Customer with an Interconnection Request that met the cluster entry requirements: (i) if the CSIS is initially undersubscribed by more than ten (10)

percent of the quantity of megawatts that the CETU developed through the CRPS was designed to enable and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, before the CSIS starts, (ii) if the CSIS is initially oversubscribed as described in Section 4.2.3.3.2 of this LGIP (e.g., the CETU developed through the CRPS is designed to enable 1,000 MW and more than 1,000 MW meet the CSIS entry requirements by the Cluster Entry Deadline), in which case the Cluster Participation Deposits will be refunded to Interconnection Customers with Interconnection Requests corresponding to the oversubscribed megawatt quantities, (iii) if the cost estimates for the CETU and the associated system upgrades provided in the final CRPS report for the entire cluster have increased by twenty-five (25) percent or more when compared to the cost estimates provided in the draft CSIS report or the draft CFAC report and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within thirty (30) Calendar Days after receipt of the draft CSIS report or the draft CFAC report in accordance with Sections 7.5 and 8.3 of this LGIP, respectively, (iv) if less than two (2) Interconnection Requests included in the CSIS or CFAC remain in the interconnection queue during the CSIS or CFAC, as applicable, in which case, the CSIS or the CFAC terminates and the remaining Interconnection Request proceeds in serial queue order, (v) at the time the Interconnection Customer with an Interconnection Request included in the CSIS provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this LGIP, (vi) if no Interconnection Customer with an Interconnection Request included in the cluster executes an Interconnection Agreement and provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this LGIP, or (vii) if all Interconnection Requests included in the cluster withdraw from the interconnection queue.

Otherwise, the initial Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue at any time after the Cluster Entry Deadline. The non-refundable initial Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **4.2.3.3 Cluster Filling, Oversubscription and Backfilling Upon Withdrawal.**

**4.2.3.3.1 Cluster Filling.** The CSIS shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area relative to the CETU identified in the final CRPS report that do not yet have a completed Interconnection System Impact Study and met the CSIS entry

requirements by the Cluster Entry Deadline up to the approximate megawatt quantity identified in the final CRPS report as potentially enabled by the CETU. The Interconnection Requests will be included in the CSIS in queue order, based on the Queue Positions assigned in accordance with Section 4.1 of this LGIP, relative to other eligible Interconnection Requests.

**4.2.3.3.2 Cluster Oversubscription.** If an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to participate in a CSIS met the CSIS entry requirements and therefore would have been eligible for inclusion in the CSIS but is excluded as a result of the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report having been exhausted in queue order under Section 4.2.3.3.1, (i) the initial Cluster Participation Deposit will be refunded to the Interconnection Customer, and (ii) the Interconnection Request will maintain its Queue Position. If there are two (2) or more such Interconnection Requests after the CSIS is filled, the System Operator will initiate another cluster to identify the transmission infrastructure to enable the interconnection of another round of Interconnection Requests consistent with Section 15.1 of Attachment K.

**4.2.3.3.3 Cluster Backfilling Upon Withdrawal.** Upon withdrawal of an Interconnection Request that is included in the CSIS, the System Operator will backfill the CSIS, in queue order, with later-queued Interconnection Requests consistent with the methodology used to fill the original CSIS as specified in Section 4.2.3.3.1 of this LGIP. The System Operator will notify all Interconnection Customers with Interconnection Requests identified by the System Operator as eligible for backfilling that the respective Large Generating Facility (or part thereof) proposed in the Interconnection Request is eligible to participate in the CSIS, and the Interconnection Customer shall have thirty (30) Calendar Days from receipt of System Operator's notice to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or accept the inclusion of the Interconnection Request (or part thereof, in which case the Interconnection Customer shall modify the Interconnection Request to reflect the appropriate reduction) in the CSIS and meet the CSIS entry requirements, consistent with Section 4.2.3.2 of this LGIP. If the Interconnection Customer does not make one of these three elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure and consider other later-queued Interconnection Requests.



**4.2.3.4 Scope of Cluster Interconnection System Impact Study.** Except as otherwise provided in this Section 4.2.3.4, the CSIS shall be conducted in accordance with Sections 7.3 and 7.4 of this LGIP. The Study Case developed for the CSIS shall also include the CETU and associated system upgrades identified in the final CRPS report. An Internal ETU can be considered, and included in the CSIS, in place of a CETU, or portion thereof, if all of the Interconnection Customers with Interconnection Requests included in the cluster that the ISO has determined need to use the Internal ETU have indicated in the Cluster Application Form or with the executed Interconnection System Impact Study Agreement that they have a contractual commitment in place providing for the Interconnection Customers to fund and the right to use the Internal ETU. The CSIS shall evaluate the proposed interconnections to the New England Transmission System under the NC Interconnection Standard consistent with Section 3.2.2 of this LGIP and as detailed in the ISO New England Planning Procedures. Consistent with the NC Interconnection Standard, the evaluation will include conditions where the projects proposed in the Interconnection Requests that are included in the CSIS are not dispatched against each other if they do not share a system constraint that would provide the basis for a redispatch condition. The CSIS shall consist of the analysis specified in Section 7.3 of this LGIP except for analysis associated with an Interconnection Feasibility Study or a preliminary, non-binding, analysis. An Interconnection Customer with an Interconnection Request being studied as part of the CSIS cannot elect to have the Interconnection Feasibility Study or a preliminary, non-binding, analysis performed as part of the CSIS.

**4.2.3.5. Restudy of Cluster Interconnection System Impact Study.** In addition to the circumstances specified in Section 7.6 of this LGIP, a re-study of the CSIS is required due to the withdrawal of an Interconnection Request that had been included in the CSIS. Upon withdrawal of an Interconnection Request that had been included in the CSIS, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study will be conducted to determine if there are any changes in the upgrades identified during the CSIS with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

#### **4.2.4. Cluster Interconnection Facilities Study.**

Notwithstanding any other provision in this LGIP, an Interconnection Customer with an Interconnection Request included in a completed CSIS will not be eligible to waive the, or request a separate, CFAC. All Interconnection Customers with an Interconnection Request included in a completed CSIS shall be

studied together in the CFAC for the purpose of implementing the conclusions of the CSIS with respect to non-sole use facilities.

**4.2.4.1 Cluster Interconnection Facilities Study Entry Requirements.** An Interconnection Customer with an Interconnection Request that was included in a completed CSIS shall execute an Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator, together with the required technical data and refundable deposit for the Interconnection Facilities Study as specified in Section 8.1 of this LGIP.

**4.2.4.2. Scope of Interconnection Facilities Study.** The CFAC will be conducted in accordance with Sections 8.2 and 8.3 of this LGIP based on a +/- 20 percent good faith cost estimate.

**4.2.4.3 Re-study of the Interconnection Facilities Study.** In addition to the circumstances specified in Section 8.5 of this LGIP, a re-study of the CFAC is required due to the withdrawal of an Interconnection Request that had been included in the CFAC. Upon withdrawal of an Interconnection Request included in the CFAC, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study of the CSIS and CFAC will be conducted to determine if there are any changes in the upgrades identified during the CSIS and CFAC with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

**4.2.4.4 Additional Cluster Participation Deposit.** Within thirty (30) Calendar Days after receipt of the final CFAC report in accordance with Section 8.3 of this LGIP, an Interconnection Customer with an Interconnection Request included in the CFAC shall submit to the System Operator an additional Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CFAC report. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The additional Cluster Participation Deposit provided under this Section 4.2.4 will be fully refunded (with interest to be calculated in accordance with Section 3.7 of this LGIP) to Interconnection Customer that submitted the additional Cluster Participation Deposit if the conditions specified in Sections 4.2.3.2.2(3)(v), (vi), or (vii) above occur.

Otherwise, the additional Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue. The non-refundable additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **4.3 Transferability of Queue Position.**

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change. The Interconnection Customer must notify the System Operator, in writing, of any transfers of Queue Position and must provide the System Operator with the transferee's contact information, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

#### **4.4 Modifications.**

The Interconnection Customer shall submit to System Operator and Interconnecting Transmission Owner, in writing, modifications to any information provided in the Interconnection Request, including its attachments. The Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Sections 4.4.1 or 4.4.4, or are determined not to be Material Modifications pursuant to Section 4.4.2. The System Operator will notify the Interconnecting Transmission Owner, and, when System Operator deems it appropriate in accordance with applicable codes of conduct and confidentiality requirements, it will notify any Affected Party of such modifications.

A request to: (1) increase the energy capability or capacity capability output of a Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to Section 5.2 of this LGIP shall require a new Interconnection Request for the incremental increase and such Interconnection Request will receive the lowest Queue Position available at that time for the purposes of cost allocation and study analysis; and (2) change from NR Interconnection Service to CNR Interconnection Service, at any time, shall require a new Interconnection Request for CNR Interconnection Service and such Interconnection Request will receive the lowest Queue Position

available at that time for the purposes of cost allocation and study analysis. Notwithstanding the foregoing, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service has until the Forward Capacity Auction for which the associated Capacity Commitment Period begins less than seven (7) years (or the years agreed to pursuant to Section 3.4.1 or Section 4.4.5) from the date of the original Interconnection Request for CNR Interconnection Service to clear the entire megawatt amount for which CNR Interconnection Service was requested. A new Interconnection Request for CNR Interconnection Service will be required for the Generating Facility to participate in any subsequent auctions.

During the course of the Interconnection Studies, either the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes do not constitute a Material Modification and are acceptable to the Parties, such acceptance not to be unreasonably withheld, System Operator and the Interconnecting Transmission Owner shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 6.4, Section 7.6 and Section 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

**4.4.1** Prior to the commencement of the Interconnection System Impact Study, modifications permitted under this Section shall include specifically: (a) a decrease of up to 60 percent of electrical output (MW) of the proposed Large Generating Facility, through either (1) a decrease in facility size or (2) a decrease in Interconnection Service level (consistent with the process described in Section 3.1) accomplished by applying System Operator-approved injection-limiting equipment proposed by the Interconnection Customer and subject to review in the Interconnection System Impact Study; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. Notwithstanding the foregoing, an Interconnection Customer may decrease the electrical output of a proposed Large Generating Facility after the Cluster Entry Deadline specified in Section 4.2.3.1 of this LGIP; however, the requesting Interconnection Customer remains responsible for costs corresponding to the megawatt quantity requested as of the Cluster Entry Deadline.

**4.4.2** Prior to making any modification other than those specifically permitted by Sections 4.4.1 and 4.4.4, Interconnection Customer may first request that the System Operator and Interconnecting Transmission Owner evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, the System Operator in consultation with the Interconnecting Transmission Owner, and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall evaluate, at the Interconnection Customer's cost, the proposed modifications prior to making them and the System Operator will inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Sections 4.4.1, 6.1, 7.2 or so allowed elsewhere, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

**4.4.3** Upon receipt of Interconnection Customer's request for modification that does not constitute a Material Modification and therefore is permitted under this Section 4.4, the System Operator in consultation with the Interconnecting Transmission Owner and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall commence and perform any necessary additional studies as soon as practicable, but in no event shall the System Operator, Interconnecting Transmission Owner, or Affected Party commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.

**4.4.4** Extensions of less than three (3) cumulative years in the Commercial Operation Date, In-Service Date or Initial Synchronization Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing, provided that the extension(s) do not exceed seven (7) years from the date the Interconnection Request was received by the System Operator.

**4.4.5** Extensions of three (3) or more cumulative years in the Commercial Operation Date, In-Service Date or Initial Synchronization Date of the Large Generating Facility to which the Interconnection Request relates or any extension of a duration that results in the Initial Synchronization Date exceeding the date the Interconnection Request was received by the System Operator by seven (7) or more years is a

Material Modification unless the Interconnection Customer demonstrates to the System Operator due diligence, including At-Risk Expenditures, in pursuit of permitting, licensing and construction of the Large Generating Facility to meet the Commercial Operation Date, In-Service Date or Initial Synchronization Date provided in the Interconnection Request. Such demonstration shall be based on evidence to be provided by the Interconnection Customer of accomplishments in permitting, licensing, and construction in an effort to meet the Commercial Operation Date, In-Service Date or Initial Synchronization Date provided in this Interconnection Request. Such evidence may include filed documents, records of public hearings, governmental agency findings, documentation of actual construction progress or documentation acceptable to the System Operator showing At-Risk Expenditure made previously, including the previous four (4) months. If the evidence demonstrates that the Interconnection Customer did not undertake reasonable efforts to meet the Commercial Operation Date, In-Service Date or Initial Synchronization Date specified in the Interconnection Request, or demonstrates that reasonable efforts were not undertaken until four (4) months prior to the request for extension, the request for extension shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed Material Modification or proceed with a new Interconnection Request for such modification.

## **SECTION 5. PROCEDURES FOR TRANSITION.**

### **5.1 Queue Position for Pending Requests.**

**5.1.1** Any Interconnection Customer assigned a Queue Position prior to March 19, 2020, shall retain that Queue Position subject to Section 4.4 of the LGIP.

**5.1.1.1** If an Interconnection Study Agreement has not been executed prior to March 19, 2020, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with the version of this LGIP in effect on March 19, 2020 (or as revised thereafter).

**5.1.1.2** If an Interconnection Study Agreement has been executed prior to March 19, 2020 and is actively under study, such Interconnection Study shall be completed in accordance with the terms of such agreement. If an Interconnection Study Agreement has been executed prior to March 19, 2020, but the Interconnection Study has not commenced, such Interconnection Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the LGIP in

effect on March 19, 2020. Interconnection Studies for Interconnection Requests seeking to interconnect into the Northern and Western Maine parts of the New England Control Area that do not have a completed Interconnection System Impact Study by November 1, 2017 shall be included in the Maine Resource Integration Study, which shall be the first CRPS. The Interconnection Customers identified in the Maine Resource Integration Study as eligible to participate in the associated Cluster System Impact Study shall make one of the elections and complete the associated requirements specified in Section 4.2.3.2 of this LGIP within thirty (30) Calendar Days from the later of November 1, 2017 or the issuance of the final Maine Resource Integration Study report. If the Interconnection Customer does not make one of the elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure.

**5.1.2 Transition Period.** To the extent necessary, the System Operator, Interconnection Customers with an outstanding Interconnection Request (i.e., an Interconnection Request for which an LGIA has neither been executed nor submitted to the Commission for approval prior to March 19, 2020), Interconnecting Transmission Owner and any other Affected Parties, shall transition to proceeding under the version of the LGIP in effect as of March 19, 2020 (or as revised thereafter) within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term “outstanding Interconnection Request” herein shall mean any Interconnection Request, on March 19, 2020: (i) that has been submitted, together with the required deposit and attachments, but not yet accepted by the System Operator; (ii) where the related LGIA has not yet been submitted to the Commission for approval in executed or unexecuted form, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding Interconnection Request as of the effective date of this LGIP may request a reasonable extension of the next applicable deadline if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension, not to exceed sixty (60) Calendar Days, shall be granted by the System Operator to the extent consistent with the intent and process provided for under this LGIP.

**5.1.3 One-Time Election for CNR Interconnection Service at Queue Position Assigned Prior to February 1, 2009.**

An Interconnection Customer with an outstanding Interconnection Request will be eligible to make a one-time election to be considered for CNR Interconnection Service at the Queue Position assigned prior to

February 1, 2009. The Interconnection Customer's one-time election must be made by the end of the New Generating Capacity Show of Interest Submission Window for the fourth Forward Capacity Auction. The Interconnection Customer's one-time election may also include a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. Interconnection Customers requesting CNR Interconnection Service will be required to comply with the requirements for CNR Interconnection Service set forth in Section 3.2.1. Interconnection Customers requesting CNR Interconnection Service that have not received a completed Interconnection System Impact Study may request a preliminary, non-binding, analysis of potential upgrades that may be necessary for the fourth Forward Capacity Auction – the prompt or near-term auction – pursuant to Sections 6.3 or 7.3, whichever is applicable.

#### **5.1.4 Interconnection Requests for Distribution Facilities Submitted Prior to August 28, 2022**

Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that submitted the Interconnection Request to the System Operator prior to August 28, 2022; and (iii) that have not completed the applicable interconnection process under a state tariff, rules or procedures shall complete the System Operator's interconnection process in Schedule 22 of Section II of the Tariff. Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that had already completed the applicable interconnection process under a state tariff, rules or procedures; and (iii) that subsequently submitted an Interconnection Request to the System Operator prior to August 28, 2022 may either complete the System Operator's interconnection process in Schedule 22 of Section II of the Tariff or withdraw the Interconnection Request submitted to the System Operator.

## **5.2 Grandfathering.**

**5.2.1** An Interconnection Customer's Generating Facility that is interconnected pursuant to an Interconnection Agreement executed or submitted to the Commission for approval prior to February 1, 2009, will maintain its status as a Network Resource with Network Resource Interconnection Service eligible to participate in the New England Markets, in accordance with the requirements of Market Rule 1, Section III of the Tariff, up to the megawatt amount specified in the Interconnection Agreement, subject to the Interconnection Customer satisfying all requirements set forth in the Interconnection Agreement and this LGIP. If the Generating Facility does not meet the criteria set forth in Section 5.2.3



of this LGIP, the Interconnection Customer will be eligible to make a one-time election, pursuant to Section 5.1.3, for Capacity Network Resource treatment without submitting a new Interconnection Request; however, the Interconnection Customer will be required to comply with the requirements for CNR Interconnection Service set forth in Section 3.2.1. Upon completion of the requirements to obtain CNR Interconnection Service, the Interconnection Customer's Interconnection Agreement shall be amended to conform to the LGIA in Appendix 6 of this LGIP.

**5.2.2** An Interconnection Customer's Generating Facility governed by an Interconnection Agreement either executed or filed with the Commission in unexecuted form prior to August 1, 2008, shall maintain the Queue Position assigned as of August 1, 2008, and be eligible to participate in the New England Markets, in accordance with the requirements in Market Rule 1, Section III of the Tariff, as in effect as of August 1, 2008, so long as the Interconnection Customer complies with all of the requirements specified in the Interconnection Agreement, including achieving the milestones associated with At-Risk Expenditures, subject to Section 4.4 of this LGIP.

**5.2.3** All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a CNR and obtain CNR Interconnection Service, in accordance with this LGIP, up to the CNR Capability of the resource. The grandfathered CNR Capability for these resources shall be equal to the megawatt amount established pursuant to the following hierarchy:

- (a) First, the megawatt amount specified in an Interconnection Agreement (whether executed or filed in unexecuted form with the Commission).
- (b) Second, in the absence of an Interconnection Agreement with a specified megawatt amount, the megawatt amount specified in an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision).
- (c) Third, in the absence of an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) with a specified megawatt amount, as determined by the System Operator based on documented historic capability of the Generating Facility.

Where a resource has both an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision), the lower megawatt amount will govern until the resource completes the applicable process(es) under the Tariff for obtaining the higher megawatt amount. The absence of an Interconnection Agreement or an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) specifying a megawatt amount shall be confirmed by an affidavit executed by a corporate officer of the resource attesting that the resource does not have an Interconnection Agreement and/or an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) that specifies a megawatt amount.

Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) specifies a megawatt amount at an ambient temperature consistent with the definition of CNR Capability, the grandfathered CNR Capability shall be equal to that amount.

Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of CNR Capability.

Where the implementation of this Section 5.2.3 results in a CNR Capability that is different than previously had been identified, the revised CNR Capability will be applied commencing with the next Forward Capacity Auction qualification process (after the revised CNR Capability value is identified), which is initiated by the closing deadline of the Show of Interest Submission Window in accordance with Section III.13 of the Tariff. The revised CNR Capability will continue to govern until the resource completes the applicable process(es) for obtaining the higher megawatt amount.

**5.2.4** All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a NR and obtain NR Interconnection Service, in accordance with this LGIP, up to the NR Capability of the resource. The grandfathered NR Capability shall be determined pursuant to the hierarchy set forth in Section 5.2.3.

Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) of a resource for which a temperature-adjustment curve is used for the claimed capability verification, as set forth in the ISO New England Manuals, specifies a megawatt amount at an ambient temperature, the grandfathered

NR Capability shall be equal to a temperature-adjusted value consistent with the definition of NR Capability.

Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of NR Capability.

### **5.3 New System Operator or Interconnecting Transmission Owner.**

If the System Operator transfers operational control of the New England Transmission System to a successor System Operator during the period when an Interconnection Request is pending, the System Operator shall transfer to the successor System Operator any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this LGIP shall be paid by or refunded to the Interconnection Customer, as appropriate. The System Operator shall coordinate with the successor System Operator to complete any Interconnection Study, as appropriate, that the System Operator has begun but has not completed.

If the Interconnecting Transmission Owner transfers ownership of its transmission facilities to a successor transmission owner during the period when an Interconnection Request is pending, and System Operator in conjunction with Interconnecting Transmission Owner has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has not either executed the LGIA or requested the filing of an unexecuted LGIA with the Commission, unless otherwise provided, the Interconnection Customer must complete negotiations with the successor transmission owner.

## **SECTION 6. INTERCONNECTION FEASIBILITY STUDY.**

### **6.1 Interconnection Feasibility Study Agreement.**

Except as otherwise provided in Section 4.2.3.4 of this LGIP, within five (5) Business Days following the System Operator's and Interconnecting Transmission Owner's receipt from the Interconnection Customer of its election to pursue the Interconnection Feasibility Study, the designation of the Point(s) of Interconnection, and the scope of Interconnection Feasibility Study to be performed pursuant to Section 3.4.4, System Operator shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement, which includes a good faith estimate of the cost for completing the Interconnection

Feasibility Study. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). No later than thirty (30) Calendar Days after its receipt of the Interconnection Feasibility Study Agreement, (a) the Interconnection Customer shall execute and deliver the agreement to System Operator and the Interconnecting Transmission Owner, (b) the Interconnection Customer shall also deliver the refundable deposit for the Interconnection Feasibility Study to the System Operator, and (c) the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) or Attachment B, depending on the scope selected pursuant to Section 3.4.4. The deposit for the study shall be 100 percent of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection Feasibility Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Interconnection Feasibility Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner on the Interconnection Feasibility Study, including the development of the study agreement and its attachment(s). Interconnecting Transmission Owner shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the Interconnection Feasibility Study each month and shall include in such invoices all employee hours and third party consultant hours, including subcontractor hours, expended toward the Interconnection Feasibility Study. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold any amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection Feasibility Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) or Attachment

B, depending on the scope elected pursuant to Section 3.4.1. If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection Feasibility Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection Feasibility Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection Feasibility Study Agreement or deposit.

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to the Parties, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to Section 6.4 as applicable. For the purpose of this Section 6.1, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Section 3.4.4, shall be the substitute.

## **6.2 Scope of Interconnection Feasibility Study.**

The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Administered Transmission System with available data and information.

The Interconnection Feasibility Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection Feasibility Study). If the Reasonable Efforts timeframe for the completion of the Interconnection Feasibility Study does not overlap with the timeframe for the overlapping interconnection

impacts analysis conducted for qualification in the Forward Capacity Auction pursuant to Section III.13.1.1.2.3 of the Tariff, then an Interconnection Customer with a CNR Interconnection Request may also request that the Interconnection Feasibility Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection Feasibility Study Agreement.

The Interconnection Feasibility Study will consist of a limited power flow, including thermal analysis and voltage analysis, and short circuit analysis. The Interconnection Feasibility Study report will provide (i) the study findings; and (ii) a preliminary description of a non-binding good faith order of magnitude estimated cost of (unless the Interconnection Customer waives such cost estimate) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating Facility as identified within the scope of the analysis performed as part of the study.

Alternatively, the Interconnection Customer may provide the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) with the executed Interconnection Feasibility Study Agreement and request that the Interconnection Feasibility Study consist of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, or electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Large Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting. In this case, the Interconnection Feasibility Study report will provide (i) the study findings; and, (ii) a preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless the Interconnection Customer waives such cost) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating Facility as identified within the scope of the analysis performed as part of the study.

To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 6.2, the Interconnection Feasibility Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

### **6.3 Interconnection Feasibility Study Procedures.**

The System Operator in coordination with Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than ninety (90) Calendar Days after System Operator and Interconnecting Transmission Owner receive the fully executed Interconnection Feasibility Study Agreement, study deposit and required technical data in accordance with Section 6.1. At the request of the Interconnection Customer or at any time the System Operator or the Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the System Operator is unable to complete the Interconnection Feasibility Study within that time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator with input from the Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow and short circuit databases that have been developed for the Interconnection Feasibility Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

System Operator shall study the Interconnection Request at the level of Interconnection Service requested by the Interconnection Customer for purposes of determining necessary Interconnection Facilities and Network Upgrades, and at the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the facility's output and the safety or reliability of the system.

#### **6.3.1 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection Feasibility Study report to the Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the

System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Feasibility Study.

#### **6.4 Re-Study.**

If re-study of the Interconnection Feasibility Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-designation of the Point of Interconnection pursuant to Section 6.1, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take not longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Feasibility Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Feasibility Study Agreement.

The Interconnection Customer shall have the option to waive the re-study and elect to have the re-study performed as part of its Interconnection System Impact Study. The Interconnection Customer shall provide written notice of the waiver and election of moving directly to the Interconnection System Impact Study within five (5) Business Days of receiving notice from the System Operator of the required re-study.

### **SECTION 7. INTERCONNECTION SYSTEM IMPACT STUDY.**

#### **7.1 Interconnection System Impact Study Agreement.**

Within five (5) Business Days following the Interconnection Feasibility Study results meeting, or subsequent to the Scoping Meeting within five (5) Business Days if the Interconnection Customer did not pursue the Interconnection Feasibility Study, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer the Interconnection System Impact Study Agreement, which includes a non-binding good faith estimate of the cost and timeframe for commencing and completing the Interconnection System Impact Study. The Interconnection System Impact Study



Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the LGIA.

## **7.2 Execution of Interconnection System Impact Study Agreement.**

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after its receipt along with a demonstration of Site Control and the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable), and the Interconnection Customer shall also deliver a refundable deposit. An Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Large Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. The deposit for the study shall be: (i) the greater of 100 percent of the estimated cost of the study or \$250,000; or (ii) the lower of 100 percent of the estimated costs of the study or \$50,000, if the Interconnection Customer can provide: (1) evidence of applications for all Major Permits, as defined in Section III.13.1.1.2.2.2(a) of the Tariff, required in support of the Interconnection Request or written certification that Major Permits are not required, or (2) evidence acceptable to the System Operator of At-Risk Expenditures (excluding Interconnection Study costs) totaling at least the amounts of money described in (i) above; or (iii) the lower of 100 percent of the estimated costs of the study or \$50,000, if the Interconnection Request is for a modification to an existing Large Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.

The deposit shall be applied toward the cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the LGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection System Impact Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise

provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of Interconnection System Impact Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the System Impact Study, including the study agreement and its attachment(s) and the LGIA. Interconnecting Transmission Owner shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the Interconnection System Impact Study each month and shall include in such invoices all employee hours and third party consultant hours, including subcontractor hours, expended toward the Interconnection System Impact Study. In the case of Clustering, CSIS costs that are associated with an individual Interconnection Request assessed within the CSIS will be charged directly to that Interconnection Customer. CSIS costs that are associated with the CSIS as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. If the Interconnection Customer elects the deposit described in (ii) above, the System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection System Impact Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable); provided that if a PSCAD model for a non-wind or non-inverter-based Large Generating Facility was determined to be needed at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model.

If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.

If the Interconnection System Impact Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting or the Interconnection Feasibility Study, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to each Party, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to Section 7.6 as applicable. For the purpose of this Section 7.2, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement if Interconnection Customer pursued the Interconnection Feasibility Study, as specified pursuant to Section 3.4.4, shall be the substitute.

### **7.3 Scope of Interconnection System Impact Study.**

The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability and operation of the New England Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection System Impact Study). An Interconnection Customer with a CNR Interconnection Request may also request that the Interconnection System Impact Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer’s Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection System Impact Study Agreement.

The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, such as electromagnetic transient analysis, including thermal analysis and voltage analysis, a system protection analysis and any other analyses that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner. The Interconnection System Impact Study report will state the assumptions upon which it is based, state the results of the analyses, and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Interconnection System Impact Study shall consider the level of Interconnection Service requested by the Interconnection Customer. However, the Interconnection System Impact Study shall consider the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the facility's output and the safety and reliability of the system. The Interconnection System Impact Study report will provide (i) a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct; (iii) a protection assessment to determine the required protection upgrades; and may provide (iv) an evaluation of the siting of the Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environment work. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.3, the Interconnection System Impact Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

#### **7.4 Interconnection System Impact Study Procedures.**

The System Operator shall coordinate the Interconnection System Impact Study with the Interconnecting Transmission Owner, and with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, that is affected by the Interconnection Request pursuant to Section 3.6 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection System Impact Study within two hundred and seventy (270) Calendar Days after the receipt of the Interconnection System Impact Study Agreement, study deposit, demonstration of Site Control, if Site Control is required, and required technical data in accordance with Section 7.2. If System

Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within the times specified in this Section 7.4.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the System Operator and Interconnecting Transmission Owner are unable to complete the Interconnection System Impact Study within the time period, the System Operator shall notify the Interconnection Customer and provide an estimated start date if the study has not commenced and completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow, short circuit and stability databases that have been developed for the Interconnection System Impact Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

Except in the case of a CSIS, the System Operator shall notify the Interconnection Customer when the Interconnection System Impact Study is expected to commence within sixty-five (65) Calendar Days. An Interconnection Customer with an Interconnection Request being studied serially will be permitted to update the technical data provided in Appendix 1 and Attachment A (and Attachment A-1, if applicable), and submit modifications to that technical data to the System Operator no later than sixty (60) Calendar Days from the date that the System Operator notified the Interconnection Customer that the Interconnection System Impact Study is expected to commence. Such modifications will not be deemed Material Modifications provided they meet the requirements of Section 4.4.1 of this LGIP.

Where sufficient time has elapsed since the initial Scoping Meeting, within ten (10) Business Days after notifying the Interconnection Customer that the Interconnection System Impact Study is expected to commence, the System Operator may convene a second Scoping Meeting for the purpose of providing

updated information to the Interconnection Customer in preparation for the submittal of updates to the technical data.

#### **7.5 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, the System Operator shall convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, to discuss the results of the Interconnection System Impact Study.

Within ten (10) Business Days following the study results meeting, the Interconnection Customer shall provide to the System Operator written notice that it will either pursue the Interconnection Facilities Study or waive the Interconnection Facilities Study and elect an expedited interconnection. Once the Interconnection Customer notifies the System Operator of its election, such election is not subject to change. If the Interconnection Customer elects to pursue the Facilities Study it must proceed with the study. If the Interconnection Customer waives the Facilities Study, it shall commit to the following milestones in the LGIA: (i) Siting approval for the Generating Facility and Interconnection Facilities; (ii) Engineering of Interconnection Facilities approved by Interconnecting Transmission Owner; (iii) Ordering of long lead time material for Interconnection Facilities and system upgrades; (iv) Initial Synchronization Date; and (v) Commercial Operation Date.

Within thirty (30) Calendar Days of the Interconnection Customer receiving the Interconnection System Impact Study report, the Interconnection Customer shall provide written comments on the report or written notice that it has no comments on the report. The System Operator shall issue a final Interconnection System Impact Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving the Interconnection Customer's notice that it will not provide comments.

#### **7.6 Re-Study.**

If re-study of the Interconnection System Impact Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) re-designation of the Point of Interconnection pursuant to Section 7.2, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a

Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing.

Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection System Impact Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection System Impact Study Agreement.

#### **7.7 Operational Readiness.**

The System Operator shall, as close to the Interconnection Customer's actual Synchronization Date as reasonably possible, ensure that operational analysis, including current stability analyses, power flow analyses, and any other analyses deemed necessary by the System Operator, are performed, and that procedures are developed or updated to address the operation of the New England Transmission System with the addition of the Interconnection Customer's Generating Facility. The operational analysis will also include tests of system performance with selected facilities out of service. Such studies shall be performed at the expense of the Interconnection Customer.

The System Operator is not obligated to perform the operational analyses described in this Section 7.7 if, in the exercise of reasonable discretion, the System Operator in consultation with Interconnecting Transmission Owner determines that interconnection of the Interconnection Customer's Generating Facility to the Administered Transmission System is remote and speculative.

### **SECTION 8. INTERCONNECTION FACILITIES STUDY.**

#### **8.1 Interconnection Facilities Study Agreement.**

Except as otherwise provided in Section 4.2.4 of this LGIP, the Interconnection Customer may waive the Interconnection Facilities Study and instead elect expedited interconnection, which means that the Interconnection Customer may enter into E&P Agreements under Section 9 if it had not already done so, and shall enter into an LGIA in accordance with the requirements specified in Section 11.

If the Interconnection Customer waives the Interconnection Facilities Study, the Interconnection Customer, subject to the specific terms of the E&P Agreements, assumes all risks and shall pay all costs associated with equipment, engineering, procurement and construction work covered by the Interconnection Facilities Study as described in Section 8.2 below.

The System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this LGIP simultaneously with the delivery of the Interconnection System Impact Study to the Interconnection Customer.

The Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection Facilities Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the LGIA. Within three (3) Business Days following the Interconnection System Impact Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer a non-binding good faith estimate of the cost for completing the Interconnection Facilities Study in accordance with requirements specified in Section 8.3. The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator within thirty (30) Calendar Days after its receipt, together with the required technical data and the refundable deposit for the Interconnection Facilities Study. In accordance with Section 8.3, the Interconnection Customer shall specify in Attachment A to the Interconnection Facilities Study Agreement whether it wants no more than a +/- 20 percent or a +/- 10 percent good faith cost estimate contained in the report. The deposit for the study shall be either: (i) the greater of twenty-five percent of the estimated cost of the study or \$250,000; or (ii) the greater of 100 percent of one month's estimated study cost or \$100,000, if the Interconnection Customer can provide: (1) evidence of applications for all Major Permits, as defined in Section III.13.1.1.2.2.2 of the Tariff, required in support of the Interconnection Request, or provide certification that Major Permits are not required or (2) evidence acceptable to the System Operator of At-Risk Expenditures (excluding Interconnection Study costs) totaling at least the amounts of money in (i) above, not including the same At-Risk Expenditures demonstrated with the Interconnection System Impact Study Agreement, if applicable; or (iii) the greater of 100 percent of one month's estimated study cost or \$100,000, if the Interconnection Request is for a modification to an existing Large Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.



Any difference between the study deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the cost of the Interconnection Facilities Studies that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Interconnection Facilities Study, the study agreement and its attachment(s) and the LGIA.

Interconnecting Transmission Owner shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the Interconnection Facilities Study each month and shall include in such invoices all employee hours and third party consultant hours, including subcontractor hours, expended toward the Interconnection Facilities Study. In the case of Clustering, CFAC costs that are associated with an individual Interconnection Request assessed within the CFAC will be charged directly to that Interconnection Customer. CFAC costs that are associated with the CFAC as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

## **8.2 Scope of Interconnection Facilities Study.**

The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Administered Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The Interconnection Facilities Study shall also identify any potential control technology for the Large Generating Facility if the Interconnection Customer has

requested Interconnection Service at a level that is lower than the nameplate capability of the facility. The scope and cost of the Interconnection Facilities Study shall include completion of any engineering work limited to what is reasonably required to (i) estimate such aforementioned cost to the accuracy specified by the Interconnection Customer pursuant to Section 8.3, (ii) identify, configurations of required facilities and (iii) identify time requirements for construction and installation of required facilities.

### **8.3 Interconnection Facilities Study Procedures.**

The System Operator shall coordinate the Interconnection Facilities Study with Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, pursuant to Section 3.6 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the study and the System Operator shall issue a draft Interconnection Facilities Study report to the Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: ninety (90) Calendar Days, with no more than a +/- 20 percent good faith cost estimate contained in the report; or one hundred eighty (180) Calendar Days, if the Interconnection Customer requests a +/- 10 percent good faith cost estimate. Such cost estimates either individually or in the aggregate will be provided in the final study report. If the System Operator uses Clustering, the System Operator and the Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection Facilities Study within the times specified in this Section 8.3.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Facilities Study, System Operator shall notify the Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, as to the schedule status of the Interconnection Facilities Study. If the System Operator is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, the System Operator shall notify the Interconnection Customer, Interconnecting Transmission Owner and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality

requirements, and provide an estimated completion date and an explanation of the reasons why additional time is required.

The Interconnection Customer and appropriate Affected Parties may, within thirty (30) Calendar Days after receipt of the draft report, provide written comments to the System Operator and Interconnecting Transmission Owner, which the System Operator shall include in the final report. The System Operator shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The System Operator may reasonably extend such fifteen-day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the System Operator or Interconnecting Transmission Owner to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, or any third party consultant retained by the Interconnection Customer supporting documentation, with workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

#### **8.4 Meeting with Parties.**

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Facilities Study.

#### **8.5 Re-Study.**

If re-study of the Interconnection Facilities Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-assessment

of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Facilities Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Facilities Study Agreement.

## **SECTION 9. ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT.**

Prior to executing an LGIA, an Interconnection Customer may request, in order to advance the implementation of its interconnection, and the Interconnecting Transmission Owner and any Affected Party shall offer the Interconnection Customer, an E&P Agreement that authorizes the Interconnecting Transmission Owner and any Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the Interconnecting Transmission Owner or any Affected Party shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer’s Queue Position or Initial Synchronization Date. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer, including a deposit of 100 percent of the estimated engineering and study costs, and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or an E&P Agreement is terminated by any Party, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment

cannot be reasonably canceled, the Interconnecting Transmission Owner or the Affected Party that is a party to an E&P Agreement may elect: (i) to take title to the equipment, in which event the Interconnecting Transmission Owner or relevant Affected Party shall refund the Interconnection Customer any amounts paid by the Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **SECTION 10. OPTIONAL INTERCONNECTION STUDY.**

### **10.1 Optional Interconnection Study Agreement.**

On or after the date when the Interconnection Customer receives Interconnection System Impact Study report and no later than five (5) Business Days after the study results meeting to review the report, the Interconnection Customer may request in writing, and the System Operator in coordination with the Interconnecting Transmission Owner shall perform, an Optional Interconnection Study. The request shall describe the assumptions that the Interconnection Customer wishes the System Operator to study within the scope described in Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, the System Operator shall provide to the Interconnecting Transmission Owner and the Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify the Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case, and (iii) specify the System Operator's and Interconnecting Transmission Owner's estimate of the cost of the Optional Interconnection Study. To the extent known by the System Operator, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. The Optional Interconnection Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Optional Interconnection Study, including the cost of developing the study agreement and its attachment(s). Notwithstanding the above, the System Operator and Interconnecting Transmission Owner shall not be required as a result of an

Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the required technical data and the refundable deposit for the Optional Interconnection Study to the System Operator. The deposit for the study shall be 100 percent of the estimated cost of the study. Any difference between the study deposit and the actual cost of the Optional Interconnection Study shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Optional Interconnection Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Optional Interconnection Study and the study agreement and its attachments(s). The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

## **10.2 Scope of Optional Interconnection Study.**

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The System Operator shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

The Optional Interconnection Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis, and any other analyses that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner.

### **10.3 Optional Interconnection Study Procedures.**

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to the System Operator and Interconnecting Transmission Owner within ten (10) Business Days of the Interconnection Customer receipt of the Optional Interconnection Study Agreement. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed-upon time period specified within the Optional Interconnection Study Agreement. If the System Operator and Interconnecting Transmission Owner are unable to complete the Optional Interconnection Study within such time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

### **10.4 Meeting with Parties.**

Within ten (10) Business Days of providing an Optional Interconnection Study report to Interconnection Customer, System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Optional Interconnection Study.

### **10.5 Interconnection Agreement Developed Based on Optional Interconnection Study.**

If the LGIA for a Large Generating Facility is based on the results of an Optional Interconnection Study, the LGIA shall reflect the conditions studied and any obligations that may involve: (i) additional studies if such conditions change, (ii) operational limits, or (iii) financial support for transmission upgrades.

## **SECTION 11. STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA).**

### **11.1 Tender.**

Interconnection Customer shall tender comments or provide notice, in writing, to the System Operator and Interconnecting Transmission Owner that the Interconnection Customer has no comments on the draft Interconnection Facilities Study report or on the draft Interconnection System Impact Study report if the Interconnection Customer waived the Interconnection Facilities Study, within thirty (30) Calendar Days of receipt of the report. Except as provided in the E&P Agreement or any mutual agreement by the entities that would be Parties to the LGIA, the System Operator shall initiate the development of the LGIA process within fifteen (15) Calendar Days after the comments are submitted or waived, by tendering to the Interconnection Customer a draft LGIA, together with draft appendices completed by the System Operator, in conjunction with the Interconnecting Transmission Owner to the extent practicable. The draft LGIA shall be in the form of the System Operator's Commission-approved standard form LGIA which is in Appendix 6 to Schedule 22. The Interconnection Customer shall return the Interconnection Customer specific information required to complete the form of LGIA, including the appendices, in Appendix 6 of Schedule 22 that the Interconnection Customer is willing to execute within thirty (30) Calendar Days after receipt of the draft from the System Operator.

### **11.2 Negotiation.**

Notwithstanding Section 11.1, at the request of the Interconnection Customer, the System Operator and Interconnecting Transmission Owner shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the Interconnection Facilities Study is complete or after the Interconnection System Impact Study is complete if the Interconnection Customer intends to waive the Interconnection Facilities Study. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than sixty (60) Calendar Days after tender by the System Operator of the draft LGIA pursuant to Section 11. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to Section 11.1 and request submission of the unexecuted LGIA with the Commission or initiate Dispute Resolution procedures pursuant to Section 13.5. If the Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have



withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute Resolution procedures pursuant to Section 13.5 within sixty (60) Calendar Days of tender of by the System Operator of the draft LGIA pursuant to Section 11.1, it shall be deemed to have withdrawn its Interconnection Request. The System Operator and Interconnecting Transmission Owner shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the mutually agreed completion of the negotiation process.

### **11.3 Evidence to be Provided by Interconnection Customer; Execution and Filing of LGIA.**

#### **11.3.1 Evidence to be Provided by Interconnection Customer.**

**11.3.1.1 Site Control.** Within fifteen (15) Business Days after receipt of the final LGIA, the Interconnection Customer shall provide (A) to the System Operator, reasonable evidence of continued Site Control, or (B) to the Interconnecting Transmission Owner, posting of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Large Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property.

**11.3.1.2 Development Milestones.** Within fifteen (15) Business Days after receipt of the final LGIA, the Interconnection Customer also shall provide to the System Operator reasonable evidence that one or more of the following milestones in the development of the Large Generating Facility, to be elected by the Interconnection Customer, has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Large Generating Facility; (v) application for an air, water, or land use permit.

At the same time, the Interconnection Customer with an Interconnection Request that was not studied using Clustering shall commit to a schedule for the payment of upgrades identified in the Interconnection

Studies or an E&P Agreement, and either: (A) provide evidence of approvals for all Major Permits, as defined in Section III.13.1.1.2.2.2(a) of the Tariff, or (B) provide to the Interconnecting Transmission Owner, in the form acceptable to the Interconnecting Transmission Owner, a refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades identified in the Interconnection Studies or an E&P Agreement, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final LGIA. If the Interconnection Customer selects option (B) above, it shall also commit in the LGIA to the achievement of: (i) milestones for the completion of Major Permit approvals, and (ii) in the case of a CNR Interconnection Request, milestones to align the LGIA with the fulfillment of terms outlined in Section III.13 of the Tariff for participation in the Forward Capacity Market.

Within fifteen (15) Business Days after receipt of the final LGIA, an Interconnection Customer with an Interconnection Request studied using Clustering that provided the additional Cluster Participation Deposit in accordance with Section 4.2.4.4 shall provide to the Interconnecting Transmission Owner, in cash, a potentially non-refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades, including any CETUs, identified in the CFAC, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final LGIA. If the Interconnection Customer does not submit this deposit (or make the initial payment) by the fifteenth Business Day after receipt of the final LGIA, the Interconnection Request shall be automatically withdrawn from the interconnection queue without further opportunity to cure, and the Interconnection Customer's initial and additional Cluster Participation Deposits shall become non-refundable. The non-refundable initial and additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in the cluster at time the facilities proposed in the Interconnection Requests achieve Commercial Operation. If an Interconnection Request is withdrawn after the Interconnection Customer's payment of twenty (20) percent of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner, then the payment shall be used to offset the costs of the CETU. Any unspent payments of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner will be refunded to the respective Interconnection Customers that executed the Interconnection Agreement and

provided to the Interconnecting Transmission Owner the twenty (20) percent deposit (or initial payment) if all the associated Interconnection Requests are withdrawn from the interconnection queue and the associated Interconnection Agreements are terminated.

**11.3.2 Execution and Filing of LGIA.** Within fifteen (15) Business Days after receipt of the final LGIA, (i) the Interconnection Customer and Interconnecting Transmission Owner shall execute three (3) originals of the tendered LGIA and return them to the System Operator, who will send an original to Interconnecting Transmission Owner and Interconnection Customer; or (ii) the Interconnection Customer shall request in writing that the System Operator and the Interconnecting Transmission Owner jointly file with the Commission an LGIA in unexecuted form. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a Commission-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the System Operator and Interconnecting Transmission Owner, in accordance with Section 11.3.3 or Section 11.3.4, as appropriate, shall jointly file the LGIA with the Commission, together with its explanation of any matters as to which the System Operator, Interconnection Customer or Interconnecting Transmission Owner disagree and support for the costs that the Interconnecting Transmission Owner proposes to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the System Operator and Interconnecting Transmission Owner for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending Commission action.

With respect to the interconnection of an Interconnection Customer under Schedule 22, the LGIA shall be a three-party agreement among the Interconnecting Transmission Owner, the System Operator and the Interconnection Customer. If Interconnecting Transmission Owner, System Operator and Interconnection Customer agree to the terms and conditions of a specific LGIA, or any amendments to such an LGIA, then the System Operator and Interconnecting Transmission Owner shall jointly file the executed LGIA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act. To the extent the Interconnecting Transmission Owner, System Operator and Interconnection Customer cannot agree to proposed variations from the standard form of LGIA in Appendix 6 or cannot otherwise agree to the terms and conditions of the LGIA for such Large Generating Unit, or any amendments to such an LGIA, then the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted LGIA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act and shall

identify the areas of disagreement in such filing, provided that, in the event of disagreement on terms and conditions of the LGIA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of the Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on such terms and conditions.

**11.3.3** The Interconnecting Transmission Owner, acting on its own or jointly with the System Operator, may initiate a filing to amend this LGIP and the standard form of LGIA in Appendix 6 under Section 205 of the Federal Power Act and shall include in such filing the views of System Operator, provided that the standard applicable under Section 205 of the Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on any financial obligations of the Interconnecting Transmission Owner or the Interconnection Customer(s), and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets.

#### **11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final LGIA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by the Commission. Upon submission of an unexecuted LGIA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall promptly comply with the unexecuted LGIA, subject to modification by the Commission.

### **SECTION 12. CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES.**

#### **12.1 Schedule.**

The Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party shall negotiate in good faith concerning a schedule for the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades.

#### **12.2 Construction Sequencing.**

**12.2.1 General.** In general, the Initial Synchronization Date of an Interconnection Customer seeking interconnection to the Administered Transmission System will determine the sequence of construction of Network Upgrades.

**12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than the Interconnection Customer.** An Interconnection Customer with an executed or unexecuted, but filed with the Commission, LGIA, in order to maintain its Initial Synchronization Date, may request that the Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such Initial Synchronization Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than the Interconnection Customer that is seeking interconnection to the Administered Transmission System, in time to support such Initial Synchronization Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party; (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

The Interconnecting Transmission Owner or appropriate Affected Party will refund to the Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the LGIA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that the Interconnecting Transmission Owner or appropriate Affected Party has not refunded to the Interconnection Customer. Payment by that entity with a contractual obligation to construct such Network Upgrades shall be due on the date that it would have been due had there been no request for advance construction. The Interconnecting Transmission Owner or appropriate Affected Party shall forward to the Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to the Interconnection Customer. The Interconnecting Transmission Owner or appropriate Affected Party then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the LGIA.

**12.2.3 Advancing Construction of Network Upgrades that are Part of the Regional System Plan of the System Operator.** An Interconnection Customer with an LGIA, in order to maintain its Initial

Synchronization Date, may request that Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such Initial Synchronization Date and (ii) would otherwise not be completed, pursuant to the Regional System Plan, in time to support such Initial Synchronization Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party any associated expediting costs.

**12.2.4 Amended Interconnection System Impact Study.** An Interconnection System Impact Study will be amended to determine the facilities necessary to support the requested Initial Synchronization Date. This amended study will include those transmission and Large Generating Facilities that are expected to be in service on or before the requested Initial Synchronization Date. The LGIA will also be amended to reflect the results of the Amended Interconnection System Impact Study and any changes in obligations, including financial support, of the Parties.

## **SECTION 13. MISCELLANEOUS.**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information treated as confidential under the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the others prior to the execution of an LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by any Party, the other Party(ies) shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may

disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**13.1.1 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the LGIA; or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**13.1.2 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

**13.1.3 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**13.1.4 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**13.1.5 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under these procedures or its regulatory requirements.

**13.1.6 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of the LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**13.1.7 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.



**13.1.8 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 CFR section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR. section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party(ies) to the LGIA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules, regulations and Section 13.1.

**13.1.9** Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Party’s(ies’) Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

**13.1.11** The System Operator and Interconnecting Transmission Owner shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time when Confidential Information is no longer needed.

## **13.2 Delegation of Responsibility.**

The System Operator and Interconnecting Transmission Owner, or any Affected Party may use the services of subcontractors as it deems appropriate to perform its obligations under this LGIP. The Party using the services of a subcontractor shall remain primarily liable to the Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

## **13.3 Obligation for Study Costs.**

The System Operator and the Interconnecting Transmission Owner shall charge, and the Interconnection Customer shall pay, the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to the Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. The Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefore. The System Operator and Interconnecting Transmission Owner shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed amounts in compliance herewith.

## **13.4 Third Parties Conducting Studies.**

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) the Interconnection Customer receives notice pursuant to Sections 6.3, 7.4 or 8.3 that the System Operator or Interconnecting Transmission Owner will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or

(iii) the Interconnection Customer receives neither the Interconnection Study nor a notice under Sections 6.3, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then the Interconnection Customer may request, which request will not be unreasonably denied, that the System Operator and Interconnecting Transmission Owner utilize a third party consultant reasonably acceptable to the System Operator, Interconnection Customer, Interconnecting Transmission Owner and any appropriate Affected Party, to perform such Interconnection Study under the direction of the System Operator or Interconnecting Transmission Owner as applicable. At other times, System Operator or Interconnecting Transmission Owner may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of the Interconnection Customer, or on its own volition.

In all cases, use of a third party consultant shall be in accord with Article 26 of the LGIA (Subcontractors) and limited to situations where the System Operator or Interconnecting Transmission Owner determines that doing so will help maintain or accelerate the study process for the Interconnection Customer's pending Interconnection Request and not interfere with the System Operator and Interconnecting Transmission Owner's progress on Interconnection Studies for other pending Interconnection Requests.

In cases where the Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, the Interconnection Customer, System Operator and Interconnecting Transmission Owner shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. The System Operator and Interconnecting Transmission Owner shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as soon as practicable upon the Interconnection Customer's request subject to the confidentiality provision in Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. In any case, such third party contract may be entered into with the System Operator, Interconnection Customer, or Interconnecting Transmission Owner at the System Operator and Interconnecting Transmission Owner's discretion. In the case of (iii) the Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this LGIP, Article 26 of the LGIA (Subcontractors), and the relevant Tariff procedures and protocols as would apply if the System Operator and Interconnecting Transmission Owner were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes.

The System Operator and Interconnecting Transmission Owner shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

### **13.5 Disputes.**

**13.5.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the “Disputing Party”) shall provide the other Party(ies) with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party’s(ies’) receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, after thirty (30) Calendar Days, then (i) in the case of disputes arising out of or in conjunction with the LGIA, the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted LGIA, or amendment thereto, with the Commission in accordance with Section 11.3.4, or (ii) in the case of disputes arising out of or in connection with any other matter regarding the administration of the LGIP, the System Operator may terminate the Interconnection Request and the Interconnection Customer may seek relief pursuant to Section 206 of the Federal Power Act. Each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this Schedule 22.

**13.5.2 External Arbitration Procedures.** Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial

Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Section 13, the terms of this Section 13 shall prevail.

**13.5.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons for such decision. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**13.5.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three-member panel and one-third of any associated arbitration costs; or (2) one-third the cost of the single arbitrator jointly chosen by the Parties and one-third of any associated arbitration costs.

**13.5.5 Non-binding Dispute Resolution Procedures.** If a Party has submitted a Notice of Dispute pursuant to Section 13.5.1, and the Parties are unable to resolve the claim or dispute through unassisted or assisted negotiations within the thirty (30) Calendar Days provided in that section, and the Parties cannot reach mutual agreement to pursue the Section 13.5 arbitration process, a Party may request that the other Parties engage in Non-binding Dispute Resolution pursuant to this Section 13.5.5 by providing written notice to the other Parties (“Request for Non-binding Dispute Resolution”). Conversely, either Party may file a Request for Non-binding Dispute Resolution pursuant to this Section 13.5.5 without first seeking mutual agreement to pursue the Section 13.5 arbitration process. The process in Section 13.5.5 shall serve as an alternative to, and not a replacement of, the Section 13.5 arbitration process. Pursuant to this process, System Operator must within 30 days of receipt of the Request for Non-binding Dispute Resolution appoint a neutral decision-maker that is an independent subcontractor that shall not

have any current or past substantial business or financial relationships with the Parties. Unless otherwise agreed by the Parties, the decision-maker shall render a decision within sixty (60) Calendar Days of appointment and shall notify the Parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of the LGIP and LGIA and shall have no power to modify or change any provision of the LGIP and LGIA in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the Parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Section 13.5 arbitration, or in a Federal Power Act Section 206 complaint. Each Party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each Party to the dispute.

### **13.6 Local Furnishing Bonds.**

**13.6.1 Facilities Financed by Local Furnishing Bonds.** This provision is applicable only to interconnections associated with facilities financed for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this LGIA and LGIP, the Interconnecting Transmission Owner shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this LGIA and LGIP if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnecting Transmission Owner's facilities that would be used in providing such Interconnection Service.

**13.6.2 Alternative Procedures for Requesting Interconnection Service.** If the Interconnecting Transmission Owner determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such Interconnection Service, it shall advise the Interconnection Customer within thirty (30) Calendar Days of receiving notice of the Interconnection Request. The Interconnection Customer thereafter may renew its Interconnection Request using the process specified in the Tariff.

## **APPENDICES TO LGIP**

- APPENDIX 1 INTERCONNECTION REQUEST
- APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT
- APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT
- APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT
- APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT
- APPENDIX 6 LARGE GENERATOR INTERCONNECTION AGREEMENT

**APPENDIX 1**  
**INTERCONNECTION REQUEST**

The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility to the Administered Transmission System under Schedule 22 - Large Generator Interconnection Procedures (“LGIP”) of the ISO New England Inc. Open Access Transmission Tariff (the “Tariff”). Capitalized terms have the meanings specified in the Tariff.

---

---

**PROJECT INFORMATION**

Proposed Project Name: \_\_\_\_\_

**1. This Interconnection Request is for (check one):**

- \_\_\_\_\_ A proposed new Large Generating Facility
- \_\_\_\_\_ An increase in the generating capacity or a modification that has the potential to be a Material Modification of an existing Generating Facility
- \_\_\_\_\_ Commencement of participation in the wholesale markets by an existing Generating Facility
- \_\_\_\_\_ A change from Network Resource Interconnection Service to Capacity Network Resource Interconnection Service

**2. The types of Interconnection Service requested:**

- \_\_\_\_\_ Network Resource Interconnection Service (energy capability only)
- \_\_\_\_\_ Capacity Network Resource Interconnection Service (energy capability and capacity capability)

If Capacity Network Resource Interconnection Service, does Interconnection Customer request Long Lead Facility treatment? Check: \_\_\_\_ Yes or \_\_\_\_ No



If yes, provide, together with this Interconnection Request, the Long Lead Facility deposit and other required information as specified in Section 3.2.3 of the LGIP, including (if the Large Generating Facility will be less than 100 MW) a justification for Long Lead Facility treatment.

3. This Interconnection Customer requests (check one, selection is not required as part of the initial Interconnection Request):

\_\_\_\_\_ An Interconnection Feasibility Study

\_\_\_\_\_ An Interconnection System Impact Study

(The Interconnection Customer shall select either option and may revise any earlier selection up to within five (5) Business Days following the Scoping Meeting.)

4. The Interconnection Customer shall provide the following information:

Address or Location of the Facility (including Town/City, County and State):

---

---

---

Approximate location of the proposed Point of Interconnection:

---

Type of Generating Facility to be Constructed: \_\_\_\_\_

Will the Generating Facility include electric storage capacity? Yes \_\_\_ No \_\_\_

If yes, describe the electric storage device and specifications:

---

---

---

**Primary frequency response operating range for electric storage resources:**

---

**Generating Facility Fuel Type:**

---

**Generating Facility Capacity (MW):**

<b>Temperatures<sup>1</sup></b>	<b>Maximum Gross MW Electrical Output<sup>2</sup></b>	<b>Maximum Net MW Electrical Output<sup>3</sup></b>	<b>Net MW Capability at the Point of Interconnection<sup>4</sup></b>
<b>At or above 90 degrees F</b>			
<b>At or above 50 degrees F</b>			
<b>At or above 20 degrees F</b>			
<b>At or above 0 degrees F</b>			

Requested capacity (in MW) of Interconnection Service (if lower than the Generating Facility Capacity):

<b>Temperatures<sup>1</sup></b>	<b>Requested Gross MW Electrical Output<sup>2</sup></b>	<b>Requested Net MW Electrical Output<sup>3</sup></b>	<b>Requested Net MW Capability at the Point of Interconnection<sup>4</sup></b>
<b>At or above 90 degrees F</b>			
<b>At or above 50 degrees F</b>			
<b>At or above 20 degrees F</b>			
<b>At or above 0 degrees F</b>			

Notes:

<sup>1</sup> In each row, insert all values corresponding to the given temperature, or a temperature greater than the given temperature, at which aggregate maximum gross output of the Generating Facility would be the highest. For example, if the aggregate maximum gross Generating Facility output occurs at 12 degrees F, all values in the “At or above 0 degrees F” row shall correspond to the 12 degrees F operating condition.

<sup>2</sup> Measured at the terminal(s) or inverter/converter terminal(s), as applicable, for each generating unit comprising the Generating Facility.

<sup>3</sup> Measured at the terminal(s) or inverter/converter terminal(s), as applicable, for each generating unit comprising the Generating Facility less any station service at each generating unit’s terminal(s) or inverter/converter terminal(s), as applicable.

<sup>4</sup> Measured at the Interconnection Customer’s proposed Point of Interconnection. The values correspond to the requested levels of Interconnection Service pursuant to Section 3.1 of the LGIP. The values account for any station service, losses incurred in Interconnection Facilities, station or generator step up transformers, and any other auxiliary systems. After the Interconnection Request is deemed valid, any increases to these values shall be subject to a new, separate Interconnection Request.

**General description of the equipment configuration, including any proposed control technologies to restrict the Large Generating Facility’s output to the requested Interconnection Service levels, if applicable (# of units and GSUs):**

---

**Requested Commercial Operations Date:**

---

**Requested Initial Synchronization Date:**

---

**Requested In-Service Date:**

---

**Evidence of Site Control (check one):**

\_\_\_\_\_ **If for Capacity Network Resource Interconnection Service, Site Control is provided herewith, as required.**

\_\_\_\_\_ **If for Network Resource Interconnection Service: (Check one)**

\_\_\_\_\_ **Is provided herewith**

\_\_\_\_\_ **In lieu of evidence of Site Control, a \$10,000 deposit is provided (refundable within the cure period as described in Section 3.4.3 of the LGIP).**

\_\_\_\_\_ **Site Control is not provided because the proposed modification is to the Interconnection Customer's existing Large Generating Facility and, by checking this option, the Interconnection Customer certifies that it has Site Control and that the proposed modification does not require additional real property.**

**The technical data specified within the applicable attachment to this form (check one):**

\_\_\_\_\_ **Is included with the submittal of this Interconnection Request form**

\_\_\_\_\_ **Will be provided on or before the execution and return of the Feasibility Study Agreement (Attachment A (and Attachment A-1, if applicable) or Attachment B, depending on the scope of the study) or the System Impact Study Agreement (Attachment A (and Attachment A-1, if applicable)), as applicable**

**The ISO will post the Project Information on the ISO web site under "New Interconnections" and OASIS.**

---

---

**CUSTOMER INFORMATION**

**Company Name:**\_\_\_\_\_

**ISO Customer ID# (If available):** \_\_\_\_\_

**(Interconnection Customer)**

**Company Address:**    **PO Box No.:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City, State ZIP:** \_\_\_\_\_

**Company Representative:**    **Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Company Representative's Company and Address (if different from above):**

**Company Name:** \_\_\_\_\_

**PO Box No.:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City, State ZIP:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **FAX:** \_\_\_\_\_ **email:** \_\_\_\_\_

---

---

**This Interconnection Request is submitted by:**

**Authorized Signature:** \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***In order for an Interconnection Request to be considered a valid request, it must:***

- (a) Be accompanied by a deposit of \$50,000.00 that is provided electronically and which may be refundable in accordance with Section 3.4.1 of the LGIP;***
- (b) For Capacity Network Resource Interconnection Service, include documentation demonstrating Site Control. If for Network Resource Interconnection Service, demonstrate Site Control or post an additional deposit of \$10,000.00. If the Interconnection Customer with an Interconnection Request for Network Resource Interconnection Service demonstrates Site Control within the cure period specified in Section 3.4.1 of the LGIP, the additional deposit of \$10,000.00 shall be refundable (An Interconnection Customer does not need to demonstrate Site Control for an Interconnection Request for a modification to its existing Large Generating Facility where the Interconnection Customer has certified that it has Site Control and that the proposed modification does not require additional real property);***
- (c) Include a detailed map, such as a map of the quality produced by the U.S. Geological Survey, which clearly indicates the site of the new facility and pertinent surrounding structures; and***
- (d) Include all information required on the Interconnection Request form and attachments thereto; and***
- (e) Include the deposit and all information required for Long Lead Facility treatment, if such treatment is requested in accordance with Section 3.2.3 of the LGIP.***

***The Interconnection Request must be submitted to the System Operator via the Interconnection Request Tracking Tool or IRTT, a web-based application for submitting, tracking and viewing Interconnection Requests available on the ISO New England website.***

**The technical data required below must be submitted no later than the date of execution of the System Impact Study Agreement pursuant to Section 7.2 of the LGIP.**

**LARGE GENERATING FACILITY DATA**

**UNIT RATINGS**

Kva	°F	Voltage
Power Factor		
Speed (RPM)		Connection (e.g. Wye)
Short Circuit Ratio		Frequency, Hertz
Stator Amperes at Rated Kva		Field Volts
Max Turbine MW	°F	

Primary frequency response operating range for electric storage resources:

Minimum State of Charge:

Maximum State of Charge:

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 90 ° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (°F)	

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 50° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (°F)	

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 20° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (° F)	

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 0° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (°F)	

**COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA**

Inertia Constant, H	=	kW sec/kVA
Moment-of-Inertia, WR <sup>2</sup>	=	lb. ft. <sup>2</sup>

Attachment A (page 3)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

**REACTANCE DATA (PER UNIT-RATED KVA)**

<b>DIRECT AXIS</b>	<b>QUADRATURE AXIS</b>
--------------------	------------------------



Synchronous – saturated	X <sub>dv</sub>	X <sub>qv</sub>
Synchronous – unsaturated	X <sub>di</sub>	X <sub>qi</sub>
Transient – saturated	X' <sub>dv</sub>	X' <sub>qv</sub>
Transient – unsaturated	X' <sub>di</sub>	X' <sub>qi</sub>
Subtransient – saturated	X'' <sub>dv</sub>	X'' <sub>qv</sub>
Subtransient – unsaturated	X'' <sub>di</sub>	X'' <sub>qi</sub>
Negative Sequence – saturated	X <sub>2v</sub>	
Negative Sequence – unsaturated	X <sub>2i</sub>	

#### **FIELD TIME CONSTANT DATA (SEC)**

Zero Sequence – saturated	X <sub>0v</sub>	
Zero Sequence – unsaturated	X <sub>0i</sub>	
Leakage Reactance	X <sub>lm</sub>	
Open Circuit	T' <sub>qo</sub>	T' <sub>do</sub>
Three-Phase Short Circuit Transient	T' <sub>d3</sub>	T' <sub>q</sub>
Line to Line Short Circuit Transient	T' <sub>d2</sub>	
Line to Neutral Short Circuit Transient	T' <sub>d1</sub>	
Short Circuit Subtransient	T'' <sub>d</sub>	T'' <sub>q</sub>
Open Circuit Subtransient	T'' <sub>do</sub>	T'' <sub>qo</sub>

#### **ARMATURE TIME CONSTANT DATA (SEC)**

Three Phase Short Circuit	T <sub>a3</sub>
Line to Line Short Circuit	T <sub>a2</sub>
Line to Neutral Short Circuit	T <sub>a1</sub>

NOTE: If requested information is not applicable, indicate by marking “N/A.”

Attachment A (page 4)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

### **MW CAPABILITY AND PLANT CONFIGURATION**

#### **LARGE GENERATING FACILITY DATA**

#### **ARMATURE WINDING RESISTANCE DATA (PER UNIT)**

Positive	R1		
Negative	R2		
Zero	R0		
Rotor Short Time Thermal Capacity $I^2t$	=		
Field Current at Rated kVA, Armature Voltage and PF	=	amps	
Field Current at Rated kVA and Armature Voltage, 0 PF		amps	
Three Phase Armature Winding Capacitance	=	microfarad	
Field Winding Resistance	=	ohms	°C
Armature Winding Resistance (Per Phase)	=	ohms	°C

### **CURVES**

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves. Designate normal and emergency Hydrogen Pressure operating range for multiple curves.

### GENERATOR STEP-UP TRANSFORMER DATA RATINGS

Capacity		Self-cooled/Maximum Nameplate
	/	Kva
Voltage Ratio		Generator side/System side/Tertiary
	/	kV
Winding Connections		Generator side/System Side/Tertiary (Delta or Wye)
	/	

Fixed Taps Available

Present Tap Setting

#### IMPEDANCE

Positive	Z1 (on self-cooled kVA rating)	%	X/R
Zero	Z0 (on self-cooled kVA rating)	%	X/R

### **EXCITATION SYSTEM DATA**

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (“PSS”) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

### **GOVERNOR SYSTEM DATA**

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

### **WIND AND INVERTER-BASED GENERATORS**

A completed Attachment A-1 Supplementary Wind and Inverter-Based Generating Facility Form to this Attachment A, must be supplied for all Interconnection Requests for wind and inverter-based Generating Facilities.

### **MODEL REQUIREMENTS**

For all Generating Facility types: A completed, fully functioning, public (*i.e.*, non-proprietary, non-confidential) Siemens PTI’s (“PSSE”) power flow model or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flow (“PSLF”) data sheet , must be supplied with this Attachment A. If additional public data sheets are more appropriate to the proposed device then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.

Attachment A (page 7)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

A PSCAD model for all wind and inverter-based Generating Facilities must be supplied with this Attachment A. If a PSCAD model is deemed required for other Generating Facility types at the Scoping Meeting, such PSCAD model must be provided to the System Operator within ninety (90) Calendar Days of the executed Interconnection System Impact Study Agreement. A benchmarking analysis, consistent with the requirements in the ISO New England Planning Procedures, confirming acceptable performance of the PSS/E model in comparison to the PSCAD model, shall be provided at the time PSCAD model is submitted.

**INDUCTION GENERATORS:**

- (\*) Field Volts:
- (\*) Field Amperes:
- (\*) Motoring Power (kW):
- (\*) Neutral Grounding Resistor (If Applicable):
- (\*)  $I_2^2t$  or K (Heating Time Constant):
- (\*) Rotor Resistance:
- (\*) Stator Resistance:
- (\*) Stator Reactance:
- (\*) Rotor Reactance:
- (\*) Magnetizing Reactance:
- (\*) Short Circuit Reactance:
- (\*) Exciting Current:
- (\*) Temperature Rise:
- (\*) Frame Size:
- (\*) Design Letter:
- (\*) Reactive Power Required In Vars (No Load):
- (\*) Reactive Power Required In Vars (Full Load):
- (\*) Total Rotating Inertia, H: Per Unit on KVA Base

Note: Please consult System Operator prior to submitting the Interconnection Request to determine if the information designated by (\*) is required.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment A to the Interconnection Request is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**SUPPLEMENTARY WIND AND INVERTER-BASED GENERATING FACILITY DATA FORM**

- a) Attach a Geographic Map Demonstrating the Project Layout and its Interconnection to the Power Grid. (Specify the name of the attachment here)
- b) Attach a Bus-Breaker Based One-line Diagram (The diagram should include each of the individual unit generators, generator number, rating and terminal voltage.) (Specify the name of the attachment here)

**i. Collection system detail impedance sheet**

If a collector system is used, attach a collector system data sheet in accordance with the one-line diagram attached above. The data sheet should include: the type, length  $Z_0$ ,  $Z_1$  and  $X_c/B$  of each circuit (feeder and collector string).

Specify the name of the attachment here: \_\_\_\_\_

**ii. Collection system aggregate (equivalent) model data sheet**

Attach an aggregate (equivalent) collection system data sheet. The data table should include: the type, length,  $Z_0$ ,  $Z_1$  and  $X_c/B$  of the equivalent circuits (feeders and collector strings).

Specify the name of the attachment here: \_\_\_\_\_

Attachment A-1 (page 2)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

- c) Summary of the Unit Models in the wind or inverter-based generating facility *(List all different unit models in the facility)*

Manufacturer Model	Type of this WTG* (if applicable)	Generator Unit Numbers in the field	Number(s) of these Units	Maximum Output of this Unit (MW)	Total MW

- \* Type 1 – Cage rotor induction generators  
 Type 2 – Induction generators with variable rotor resistance  
 Type 3 – Doubly-fed asynchronous generators with rotor-side converter  
 Type 4 – Full-power converter interface

***Repeat the following sections from 4 to 12 for each different unit model.***



d) Unit Detail Information

Unit Manufacturer Model	
Terminal Voltage	
Rating of Each Unit (MVA)	
Maximum Gross Electrical Output (MW)	
Minimum Gross Electrical Output(MW)	
Lagging Reactive Power Limit at Rated Real Power Output (MVAR)	
Leading Reactive Power Limit at Rated Real Power Output (MVAR)	
Lagging Reactive Power Limit at Zero Real Power Output (MVAR)	
Leading Reactive Power Limit at Zero Real Power Output (MVAR)	
Station Service Load(MW, MVAR)	
Minimum short circuit ratio(SCR) requirement by manufacturer	
On which bus the minimum SCR is required by manufacturer	
What voltage level the minimum SCR is required by manufacturer	
Positive sequence Xsource	
Zero sequence Xsource	

e) Unit GSU – \_\_\_\_\_

Nameplate rating(MVA)	
Total number of the GSUs	
Voltages, generator side/system side	
Winding connections, low voltage/high voltage	
Available tap positions on high voltage side	
Available tap positions on low voltage side	
Will the GSU operate as an LTC?	
Desired voltage control range if LTC	
Tap adjustment time (Tap switching delay + switching time) if LTC	
Desired tap position if applicable	
Impedance, Z1, X/R ratio	
Impedance, Z0, X/R ratio	

f) Low Voltage Ride Through(LVRT) – \_\_\_\_\_(*Specify the Manufacturer Model of this Unit*)

Does each Unit have LVRT capability?

Yes\_\_\_ No\_\_\_

If yes, please provide:

i. Unit LVRT mode activation and release condition:

When operating at maximum real power, what is the Unit terminal voltage for LVRT mode activation? \_\_\_\_\_

When operating at maximum real power, what is the Unit terminal voltage for releasing LVRT mode after it is activated? \_\_\_\_\_

If there is different LVRT activation and release logic, please state here \_\_\_\_\_

- ii. A wind or other inverter-based generating facility technical manual from the manufacturer including description of LVRT functionality:

***Attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- iii. Does the wind or other inverter-based generating facility technical manual attached above include a reactive power capability curve?

Yes\_\_ No\_\_

***If no, attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- g) Low Voltage Protection (considering LVRT functionality)

(Specify the Manufacturer Model of this Unit)

Low Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

- h) High Voltage Protection - \_\_\_\_\_(Specify the Manufacturer Model of this Unit)

Attachment A-1 (page 6)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

High Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

i) Low Frequency Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

Low Frequency Setting (Hz)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

j) High Frequency Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

High Frequency Setting (Hz)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

Please make sure the settings in sections 7 through 10 comply with NERC and NPCC standards for generator protection relays.

Attachment A-1 (page 7)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

k) Unit Reactive Power Control - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

i. What are the options for the Unit reactive power control (check all available)?

- \_\_\_\_Control the voltage at the Unit terminal
- \_\_\_\_Control constant power factor at the Unit terminal
- \_\_\_\_Control constant power factor at the low side of the station main transformer
- \_\_\_\_Control constant power factor at the high side of the station main transformer
- \_\_\_\_Control voltage at the low side of the station main transformer
- \_\_\_\_Control voltage at the high side of the station main transformer
- \_\_\_\_Other options. Please describe if select others\_\_\_\_\_

ii. In all the control options selected above, please list the options in which the Unit is able to control its terminal voltage to prevent low/high voltage tripping.

\_\_\_\_\_

iii. What is the desired control mode from the selected options above? Specify the control plan in this mode. For example: control voltage at which bus to what schedule.

\_\_\_\_\_

**I) Wind or inverter-based generating facility Model**

*(All model files provided under this section 12 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)*

Attachment A-1 (page 8)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

**i. Power flow model**

i. A \*.RAW file including **aggregated/equivalent** wind or inverter-based generating facility power flow model with appropriate parameters and settings.

***Attach the \*.RAW file and specify the name of the attachment here:***

\_\_\_\_\_

- ii. A \*.RAW file including **detailed** wind or inverter-based generating facility power flow model with appropriate parameters and settings. (*Optional*)

***Attach the \*.RAW file and specify the name of the attachment here:***

\_\_\_\_\_

- ii. Dynamic simulation model

***(Please note that the dynamic model must match the aggregated/equivalent power flow model provided above. Attach the following information for each of the models.)***

- i. Wind or inverter-based generating facility Model \_\_\_\_\_ (Please Specify the Manufacturer Model)

- ii. A compiled PSS/E dynamic model for the turbines (a \*.LIB or \*.OBJ file)

***Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:***

\_\_\_\_\_

Attachment A-1 (page 9)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

- iii. A dynamic data file with appropriate parameters and settings for the turbines (typically a \*.DYR file)

***Attach the \*.DYR file and specify the name of the attachment here:***

\_\_\_\_\_

- iv. PSS/E wind or inverter-based generating facility model user manual for the WTG

***Attach and specify the name of the attachment here:***

\_\_\_\_\_

***Repeat the above sections from 6 to 12 for each different wind or inverter-based generating facility model.***

m) Power Plant Controller

Will the wind or inverter-based generating facility be equipped with power plant controller, which has the ability to centrally control the output of the units? Yes\_\_ No\_\_

If yes, please provide:

i. Manufacturer model of the power plant controller

\_\_\_\_\_

ii. What are the reactive power control strategy options of the power plant controller?

iii. Which of the control option stated above is being used in current operation?

\_\_\_\_\_

Attachment A-1 (page 10)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

iv. Is the power plant controller able to control the unit terminal voltages to prevent low/high voltage tripping?

Yes\_\_ No\_\_

Please provide the park controller technical manual from the manufacturer

***Attach the file and specify the name of the attachment here:***

\_\_\_\_\_

n) Station Transformer

Transformer Name	
Nameplate ratings (MVA)	
Total number of the main transformer(s)	
Voltage, High/Low/Tertiary (kV)	
Winding connections, High/Low Tertiary	
Available tap positions on high voltage side	
Available tap positions on low voltage side	
Will the transformer operate as a LTC?	
Desired voltage control range if LTC	

Attachment A-1 (page 11)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

Tap adjustment time (Tap switching delay + switching time) if LTC		
Desired tap position if applicable		
Tap adjustment time (Tap switching delay + switching time)		
Impedance $Z_1$ , X/R ratio	$Z_{1H-L}$	X/R
	$Z_{1H-T}$	X/R
	$Z_{1T-L}$	X/R
Impedance $Z_0$ , X/R ratio	$Z_{0H-L}$	X/R
	$Z_{0H-T}$	X/R
	$Z_{0T-L}$	X/R



- o) Dynamic Simulation Model for the Power Plant Controller(s) (if applicable )

*(All model files provided under this section 15 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)*

- i. A compiled PSS/E dynamic model for the power plant controller(s) (a \*.LIB or \*.OBJ file)

*Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:*

---

- ii. A dynamic data file with appropriate parameters and settings for the power plant controller(s) (typically a \*.DYR file).

*Please set the parameters in accordance with the currently used control mode.*

*Attach the \*.DYR file and specify the name of the attachment here:*

Attachment A-1 (page 12)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

- 
- iii. PSS/E model user manual for the power plant controller(s)

*Attach the manual and specify the name of the attachment or specify the name of the attachment here:*\_\_\_\_\_

- p) Capacitors and Reactors

Please provide necessary modeling data for all the capacitors and reactors belong to the facility, including: size, basic electrical parameters, connecting bus, switched or fixed, etc.

- q) Dynamic Device(s)

*(All model files provided under this section 17 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)*

- i. Provide necessary modeling data file for all the dynamic devices belong to the facility.

Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:

---

- 17.2 A dynamic data file containing the parameters for the units (typically a \*.DYR file).

Set the parameters in accordance with the desired control mode.

Attach the \*.DYR file and specify the name of the attachment here:

---

Attachment A-1 (page 13)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

- r) Collection System/Transformer Tap-Setting Design

Attach a collection system/transformer tap-setting design calculations, consistent with the requirements in the ISO New England Planning Procedures, that identify the calculations to support the proposed tap settings for the unit step-up transformers and the station step-up transformers.

Attached the design document and specify the name of the attachment here:

---

- s) Additional Information

Are there any special features available to be implemented to the wind or inverter-based generating facility? Such as weak grid interconnection solutions, etc.

Specify the available features here:

---

***Insert the technical manual for each of the features listed above as objects (display as icons) or specify the name of the attachment here:***

---

- t) Provide PSCAD Model and Documentation for the wind or inverter-based generating facility, the Power Plant Controller(s) and Other Dynamic Devices for the wind or inverter-based generating facility.

***ISO will determine how much PSCAD work is needed from the wind or inverter-based generating facility based on its interconnection system conditions.***

Attachment A-2  
To Attachment A of Appendix 1  
Cluster System Impact Study  
Application Form

### **CLUSTER SYSTEM IMPACT STUDY APPLICATION FORM**

The undersigned Interconnection Customer submits this form to request the inclusion of the Interconnection Request for its Large Generating Facility in a Cluster Interconnection System Impact Study pursuant to Section 4.2.3.2.2 of this LGIP.

To be included in a Cluster Interconnection System Impact Study, the following must be submitted together with this form to the System Operator by the Cluster Entry Deadline:

1. Project Information:

a. Project Name: \_\_\_\_\_

(a) Queue Position: \_\_\_\_\_

- (b) Is the Interconnection Request contractually associated with an Interconnection Request for an Elective Transmission Upgrade? Yes \_\_\_\_ No \_\_\_\_

If yes, identify Queue Position of the associated Interconnection Request and provide evidence of the contractual commitment. Queue Position No.: \_\_\_\_

2. Initial Cluster Participation Deposit as specified in Section 4.2.3.2.2

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**The technical data required below must be submitted no later than the date of execution of the Feasibility Study Agreement pursuant to Section 6.1 of the LGIP.**

**Complete all fields. If field is not applicable, state “N/A”.**

**A. LARGE GENERATING FACILITY DATA**

(Aggregated data for all units at the Generating Facility)

	0°F	50°F
1. Total gross Generating Facility rated real power output (MW)		
2. Total gross lagging reactive capability of generator(s) at rated output (MVAR)		
3. Total gross leading reactive capability of generator(s) at rated output (MVAR)		
4. Total station service load (MW)		
5. Total station service load (MVAR)		

## B. INDIVIDUAL GENERATING UNIT DATA

(Repeat the relevant table for each distinct type of generating unit utilized at the facility)

(Greatest unit rating at ambient temperature of 50°F or above)

<b>Synchronous Generators</b>	
1. Generating unit manufacturer	
2. Generating unit model	
3. Number of generating units	
4. Generating unit gross rated real power output (MW)	
5. Generating unit gross lagging reactive capability at rated output (MVAR)	
6. Generating unit gross leading reactive capability at rated output (MVAR)	
7. Generator rated MVA	
8. Station service (MW)	
9. Station service (MVAR)	
10. Net generator output (MW)	
11. Net generator output (MVAR)	
12. Nominal terminal voltage (kV)	
13. Rated power factor (%)	
14. Direct axis, positive sequence, sub-transient reactance on generator base in per unit, $X''_{dv}$ (Unsaturated)	
15. Positive sequence, generator AC resistance on generator base in per unit, $R_a$	

Technical Data Required For  
Interconnection Feasibility Study

<b>Wind Turbine Generators</b>	
1. Wind turbine manufacturer	
2. Wind turbine model	
3. Number of wind turbines	
4. Wind turbine type (1/2/3/4)	
5. Wind turbine unit rated output (MW)	
6. Wind turbine unit gross lagging reactive capability at rated output and at nominal terminal voltage (MVAR)	
7. Wind turbine unit gross leading reactive capability at rated output and at nominal terminal voltage (MVAR)	
8. Wind turbine converter rated MVA (Type 3 & 4)	
9. Nominal terminal voltage (kV)	
10. Rated power factor (%)	
11. Direct axis, positive sequence, sub-transient reactance on generator base, $X''_{dv}$ (Unsaturated) in per unit	
12. Positive sequence, generator AC resistance on generator base in per unit, $R_a$	

<b>Non-Wind Inverter-Based Generators</b>	
1. Inverter manufacturer	
2. Inverter model	
3. Number of inverters	
4. Inverter unit rated output (MW)	
5. Inverter unit gross lagging reactive capability at rated output and at nominal terminal voltage (MVAR)	
6. Inverter unit gross leading reactive capability at rated output and at nominal terminal voltage (MVAR)	
7. Inverter rated MVA	
8. Nominal terminal voltage (kV)	
9. Rated power factor (%)	
<b>Additional Data for Battery Energy Storage System (BESS)</b>	
10. Maximum charging power (MW)	
11. Will BESS be charged from the Administered Transmission System? (Yes/No)	



### C. GENERATOR SHORT CIRCUIT DATA

(Repeat the relevant table for each distinct type of generating unit utilized at the facility)

<b>Synchronous Generator(s)</b>		
MVA base for data		
kV base for data		
	R (per unit)*	X (direct axis, saturated) (per unit)*
1. Subtransient		
2. Transient		
3. Synchronous		
4. Negative Sequence		
5. Zero Sequence		
6. Connection (delta, grounded WYE, ungrounded WYE, impedance grounded)		
7.a. Ground resistance if impedance grounded (per unit)		
7.b. Ground reactance if impedance grounded (per unit)		

\* Provide impedance in per unit on the generator MVA base

Technical Data Required For  
Interconnection Feasibility Study

<b>Inverter-Based Resources (including Type 3 &amp; 4 Wind Turbine)</b>	
Full load current magnitude (Amps) per inverter	
Instantaneous controlled fault current magnitude (Amps) per inverter	

**D. TRANSFORMER RATINGS DATA**

(Repeat the table for each distinct type of station generator step-up transformer utilized at the facility)

Station generator step-up transformer (Station Transformer)			
Number of Station Transformer(s)			
	Self-cooled	Maximum nameplate	
Capacity (kVA)			
	Generator side	System side	Tertiary
Voltage ratio (kV)			
	Low voltage	High voltage	Tertiary voltage
Winding connections (Delta or Wye)			
	Tap settings		
Fixed taps available		Present tap setting	

## Interconnection Feasibility Study

(Repeat the table for each distinct type of generating unit step-up transformer utilized at the facility)

Generating unit step-up transformer (GSU) (Wind turbine and inverter-based Generating Facilities)			
Number of GSU(s)			
	Self-cooled	Maximum nameplate	
Capacity (kVA)			
	Generator side	System side	Tertiary
Voltage ratio (kV)			
	Low voltage	High voltage	Tertiary voltage
Winding Connections (Delta or Wye)			
	Tap settings		
Fixed taps available		Present tap setting	

### E. TRANSFORMER IMPEDANCE DATA

(Repeat the table for each distinct type of GSU transformer and station transformer on self-cooled kVA rating)

2-Winding Transformer			
Data For (Check One)	GSU	Station Transformer	
MVA Base for Data			
	R (p.u.)	X (p.u.)	X/R
Positive Sequence			
Zero Sequence			

3-Winding Transformer				
Data For (Check One)	GSU	Station Transformer		
MVA Base for Data				
	R (p.u.)	X (p.u.)	X/R	Positive Sequence
High Side-Low Side				
High Side-Tertiary				
Low Side-Tertiary				
High Side-Low Side				Zero Sequence
High Side-Tertiary				
Low Side-Tertiary				

#### F. COLLECTOR SYSTEM EQUIVALENCE IMPEDANCE DATA FOR WIND/PHOTOVOLTAIC PLANTS

(Provide data below in per unit on 100 MVA and nominal line voltage (kV) base. Do not include Station Transformer impedance)

1. Nominal voltage (kV)		
2. Positive sequence resistance (R1) , reactance (X1)		
3. Zero sequence resistance (R0), reactance (X0)		
4. Total branch charging susceptance, B		

Attachment B (page 9)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

#### G. INTERCONNECTION FACILITIES TIE LINE DATA

(Provide data below in per unit on 100 MVA and nominal line voltage (kV) base)

(Only list data for lines that are to be added by the generation developer)

1. Nominal Voltage (kV)	
-------------------------	--

2. Line termination points (The proposed line will connect point 2.a with point 2.b)	2.a.	
	2.b.	
3. Positive sequence resistance (R1) , reactance (X1)		
4. Zero sequence resistance (R0), reactance (X0)		
5. Total branch charging susceptance, B		

**In addition, provide the following data:**

13 Reactive capability curve

14 For synchronous generator(s)

15. A complete Siemens PTI (“PSSE”) format steady state power flow model of the Generating Facility (including Interconnection Facilities tie-line, if applicable)

16. A short-circuit model of the Generating Facility (including Interconnection Facilities tie-line, if applicable) in ASPEN OneLiner (.OLR) format

15 For collector-based Generating Facilities

15.1 A complete Siemens PTI (“PSSE”) format steady state power flow single-machine equivalent model shall be used for each major feeder branch of the Generating Facility as described in Planning Procedure 5-6 (Interconnection Planning Procedure for Generation and Elective Transmission Upgrades)

15.2 A single-machine equivalent short-circuit model of the Generating Facility (including Interconnection Facilities tie-line, if applicable) in ASPEN OneLiner (.OLR) format

Attachment B (page 10)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment B to the Interconnection Request is true and accurate.

For Interconnection Customer:\_\_\_\_\_Date:\_\_\_\_\_

**SURPLUS INTERCONNECTION SERVICE REQUEST APPLICATION**

The Surplus Interconnection Customer submits this application to request Surplus Interconnection Service pursuant to Section 3.3 of this LGIP.

**SURPLUS INTERCONNECTION CUSTOMER AND ORIGINAL INTERCONNECTION  
CUSTOMER INFORMATION**

Surplus Interconnection Customer Company Name: \_\_\_\_\_

ISO Customer ID# (If available): \_\_\_\_\_

Company Address:

PO Box No.: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Company Representative:      Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Representative's Company and Address (if different from above):

Company Name: \_\_\_\_\_

PO Box No.: \_\_\_\_\_

Attachment C (page 2)  
To Appendix 1  
Surplus Interconnection Service  
Request Application

Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_ E-mail: \_\_\_\_\_

Original Interconnection Customer Company Name: \_\_\_\_\_

ISO Customer ID# (If available): \_\_\_\_\_

Company Address:

PO Box No.: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Company Representative: Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Representative's Company and Address (if different from above):

Company Name: \_\_\_\_\_

PO Box No.: \_\_\_\_\_

Attachment C (page 3)  
To Appendix 1  
Surplus Interconnection Service  
Request Application



Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_ email: \_\_\_\_\_

---

---

### **PROJECT INFORMATION**

Description of the Original Interconnection Customer's existing, commercial Large Generating Facility:

---

---

Description of the Surplus Interconnection Customer's Generating Facility:

---

---

Select Type of Interconnection Service for the Surplus Interconnection Customer's Generating Facility:

☐ CNR Interconnection Service

☐ NR Interconnection Service

Specify the amount of Unused Capability at the corresponding CNR Interconnection Service or NR Interconnection Service available for the Surplus Interconnection Customer's Generating Facility:

---

---

Attachment C (page 4)  
To Appendix 1  
Surplus Interconnection Service  
Request Application

Requested Commercial Operations Date for the Surplus Interconnection Customer's Generating Facility:

---

Requested Initial Synchronization Date for the Surplus Interconnection Customer's Generating Facility:

---

Requested In-Service Date for the Surplus Interconnection Customer's Generating Facility:

---

To request Surplus Interconnection Service, the Surplus Interconnection Customer shall provide the following, together with this Surplus Interconnection Service Request Application:

- 11 The Original Interconnection Customer's written consent for the Surplus Interconnection Customer's Generating Facility to use Unused Capability associated with Interconnection Service established under the Interconnection Agreement for the Original Interconnection Customer's Generating Facility, together with a copy of that Interconnection Agreement;
- 12 A detailed description of the Original Interconnection Customer's Generating Facility and the Surplus Interconnection Customer's Generating Facility and their respective Interconnection Facilities and existing Point of Interconnection and Point of Change of Ownership, together with a completed Attachment A and Attachment A-1, as applicable, to Appendix 1 of this LGIP, including a site electrical one-line diagram reflecting both the Original Interconnection Customer's Generating Facility and the proposed Surplus Interconnection Customer's Generating Facility and a plot plan; and
- 13 Site Control for the Surplus Interconnection Customer's Generating Facility.

Attachment C (page 5)  
To Appendix 1  
Surplus Interconnection Service  
Request Application

System Operator and Interconnecting Transmission Owner reserve the right to request additional technical and non-technical information necessary from the Original Interconnection Customer or the Surplus

Interconnection Customer as may reasonably become necessary to facilitate their review of the Surplus Interconnection Service request.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

Authorized Signature: \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX 2**  
**INTERCONNECTION FEASIBILITY STUDY AGREEMENT**

THIS AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Large Generating Facility to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection Procedures (“LGIP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).

- 2.0 Interconnection Customer elects and System Operator shall cause to be performed an Interconnection Feasibility Study consistent with Section 6.0 of the LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in Attachment A (and Attachment A-1, if applicable) or Attachment B to the Interconnection Request, as may be modified as the result of the Scoping Meeting. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 3.4.4 of the LGIP. If, after the designation of the Point of Interconnection pursuant to Section 3.4.4 of the LGIP, Interconnection Customer modifies its Interconnection Request pursuant to Section 4.4, the time to complete the Interconnection Feasibility Study may be extended.
- 5.0 The Interconnection Feasibility Study report shall provide the following information depending on whether the Feasibility Study consisted of (a) a limited power flow, including thermal analysis and voltage analysis, and short circuit analysis, or (b) limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, or electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Large Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting:
- If the study consisted of a limited power flow, including thermal analysis, voltage analysis, and short circuit analysis, preliminary identification of: (1) any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection; (2) any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection; (3) Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating

Facility, together with a non-binding good faith order of magnitude estimated cost of (unless the Interconnection Customer waives such cost estimate) and the time to construct such facilities as identified within the scope of the analysis performed; or

- If the study consisted of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, or electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Large Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting: (1) the study findings; and (2) preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless Interconnection Customer waives such cost) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating Facility as identified within the scope of the analysis performed as part of the study.

In accordance with the LGIP, in performing the Interconnection Feasibility Study, System Operator and Interconnecting Transmission Owner shall coordinate with each other and Affected Parties, and shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study and the development of this Interconnection Feasibility Study Agreement and its attachment(s). Interconnecting Transmission Owner's and System Operator's good faith estimate for the time of completion of the Interconnection Feasibility Study Agreement is [insert date].

The total estimated cost of the performance of the Interconnection Feasibility Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_. Any difference between the deposit and the actual cost of the Interconnection Feasibility Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Feasibility Study System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study.

Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Feasibility Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Feasibility Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Feasibility Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Feasibility Study, the content of the Interconnection Feasibility Study, or the conclusions of the Interconnection Feasibility Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or an Interconnecting Transmission



Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or an Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Feasibility Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Feasibility Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.

- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

Interconnecting Transmission Owner

By:

By:

Title:

Title:

Date:

Date:

[Insert name of Interconnection Customer]

By:

Title:

Date:

Attachment A to  
Appendix 2  
Interconnection Feasibility  
Study Agreement

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION FEASIBILITY STUDY**

The Interconnection Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]



**APPENDIX 3**  
**INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility to the Administered Transmission System;

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection Feasibility Study (the “Feasibility Study”) and provided the results of said study to the Interconnection Customer (This recital is to be omitted if Interconnection Customer has elected to forego the Interconnection Feasibility Study); and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection Procedure (“LGIP”).
- 2.0 Interconnection Customer elects and System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection System Impact Study consistent with Section 7.0 of the LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study unless Interconnection Customer did not pursue the Interconnection Feasibility Study, and the technical information provided by Interconnection Customer in Attachment A (and Attachment A-1 as applicable) to the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection;
  - identification of any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection;
  - initial review of grounding requirements and electric system protection;
  - identification of any instability or inadequately damped response to system disturbances resulting from the interconnection;

- description and non-binding, good faith estimated cost of and the time to construct the facilities required to interconnect the Large Generating Facility to the Administered Transmission System and to address the identified short circuit, instability, and power flow issues; and
- to the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.4 of the LGIP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

6.0 The Interconnection Customer is providing a deposit equal to:

- i. the greater of 100 percent of the estimated cost of the Interconnection System Impact Study or \$250,000;  
or
- ii. the lower of 100 percent of the estimated cost of the Interconnection System Impact Study or \$50,000, if the Interconnection Customer is providing herewith either:
  - (a) evidence of applications for all Major Permits, as defined in Section III.13.1.1.2.2.2(a) of the Tariff, required in support of the Interconnection Request, or provide certification that Major Permits are not required or
  - (b) evidence acceptable to the System Operator of At-Risk Expenditures (excluding study costs) totaling at least the amounts of money described in (i) above.
 or
- iii the lower of 100 percent of the estimated costs of the study or \$50,000 if the Interconnection Request is for a modification to an existing Large



Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.

The deposit shall be applied toward the cost of the Interconnection System Impact Study and the development of this Interconnection System Impact Study Agreement and its attachment(s) and the LGIA. Interconnecting Transmission Owner's and System Operator's good faith estimate for the times of commencement and completion of the Interconnection System Impact Study is [insert dates].

The total estimated cost of the performance of the Interconnection System Impact Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection System Impact Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study.

System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study each month. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

In accordance with the LGIP, in performing the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

## 7.0 Miscellaneous.

- 7.1 Accuracy of Information. Except as a Party (“Providing Party”) may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.
- 7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection System Impact Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection System Impact Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection System Impact Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection System Impact Study, the content of the Interconnection System Impact Study, or the conclusions of the Interconnection System Impact Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 7.3 Force Majeure, Liability and Indemnification.
- 7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement

is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

- 7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, an Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities (“Losses”) by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection System Impact Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.

7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection System Impact Study is completed. This

Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.

- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision,

rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.

7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.

7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

By:

Title:

Date:

Interconnecting Transmission Owner

By:

Title:

Date:

[Insert name of Interconnection Customer]

By:

Title:

Date:

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION SYSTEM IMPACT STUDY**

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study unless Interconnection Customer did not pursue the Interconnection Feasibility Study, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration. [Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]

**APPENDIX 4**  
**INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated ; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility to the Administered Transmission System; and

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection System Impact Study (the “System Impact Study”) and provided the results of said study to the Interconnection Customer; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:



- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection Procedures (“LGIP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 Interconnection Customer elects and System Operator shall cause an Interconnection Facilities Study consistent with Section 8.0 of the LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), and schedule for required facilities to interconnect the Large Generating Facility to the Administered Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 The Interconnection Customer is providing a deposit equal to:
  - i. the greater of 25 percent of the estimated cost of the Interconnection Facilities Study or \$250,000;  
or
  - ii. the greater of 100 percent of the estimated monthly cost of the Interconnection Facilities Study Agreement or \$100,000, if the Interconnection Customer can provide either:
    - (a) evidence of application for all Major Permits, as defined in Section III.13.1.1.2.2(a) of the Tariff, required in support of the Interconnection Request, or provide certification that Major Permits are not required or

- (b) evidence acceptable to the System Operator of At-Risk Expenditures (excluding Interconnection Study costs) totaling at least the amount of the money in (i) above, not including the At-Risk Expenditures demonstrated with the Interconnection System Impact Study Agreement, if applicable.

or

- iii. the greater of 100 percent of one month's estimated study cost or \$100,000, if the Interconnection Request is for a modification to an existing Large Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.

The deposit shall be applied toward the cost of the Interconnection Facilities Study and the development of this Interconnection Facilities Study Agreement and its attachment(s) and the LGIA. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

The total estimated cost of the performance of the Interconnection Facilities Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Facilities Study, System Operator and Interconnecting Transmission Owner shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study. System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

In accordance with the LGIP, in performing the Interconnection Facilities Study, Interconnecting Transmission Owner and System Operator shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

6.0 Miscellaneous.

6.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

6.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Facilities Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Facilities Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Facilities Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Facilities Study, the content of the Interconnection Facilities Study, or the conclusions of the Interconnection Facilities Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 6.3 Force Majeure, Liability and Indemnification.

6.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

6.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers,

employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 6.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 6.4 Third-Party Beneficiaries. Without limiting Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Facilities Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 6.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Facilities Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 6.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 6.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 6.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 6.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 6.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.

- 6.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 6.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 6.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 6.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

By:

Title:

Date:

Interconnecting Transmission Owner

By:

Title:

Date:

[Insert name of Interconnection Customer]

By:

Title:

Date:



**INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE  
INTERCONNECTION FACILITIES STUDY**

Interconnection Customer elects (check one):

- b. +/- 20 percent cost estimate contained in the Interconnection Facilities Study report.
- c. +/- 10 percent cost estimate contained in the Interconnection Facilities Study report.

Interconnecting Transmission Owner and System Operator shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to the Interconnection Customer within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:

- ninety (90) Calendar Days with no more than a +/- 20 percent cost estimate contained in the report, or
- one hundred eighty (180) Calendar Days with no more than a +/- 10 percent cost estimate contained in the report.

**DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER  
WITH THE  
INTERCONNECTION FACILITIES STUDY AGREEMENT**

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new ring bus or existing New England Transmission System station. Number of generation connections:

On the one line indicate the generation capacity attached at each metering location. (Maximum load on Current Transformer/Power Transformer (“CT/PT”))

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes \_\_\_\_\_ No \_\_\_\_\_

(Please indicate on one line).

What type of control system or Power Line Carrier (“PLC”) will be located at the Interconnection Customer’s Large Generating Facility?

What protocol does the control system or PLC use?

Attachment B (page 2)  
Appendix 4  
Interconnection Facilities  
Study Agreement

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to Interconnecting Transmission Owner's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with System Operator and Interconnecting Transmission Owner.

Is the Large Generating Facility in Interconnecting Transmission Owner's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ Local provider:

Please provide proposed schedule dates:

Begin Construction Date:

Generator step-up transformer Date:

Receives back feed power Date

Generation Testing Date:

Commercial Operation Date:

**APPENDIX 5**  
**OPTIONAL INTERCONNECTION STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer is proposing to establish an interconnection to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has submitted to System Operator an Interconnection Request; and

**WHEREAS**, on or after the date when the Interconnection Customer receives the Interconnection System Impact Study results, Interconnection Customer has further requested that the System Operator and Interconnecting Transmission Owner prepare an Optional Interconnection Study.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection

Procedures (“LGIP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).

- 2.0 Interconnection Customer elects and System Operator shall cause an Optional Interconnection Study consistent with Section 10.0 of the LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Optional Interconnection Study shall be performed solely for informational purposes.
- 5.0 The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify Interconnecting Transmission Owner’s Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the assumptions specified by the Interconnection Customer in Attachment A.  
  
In accordance with the LGIP, in performing the Optional Interconnection Study, the System Operator shall coordinate with Interconnecting Transmission Owner and Affected Parties, and shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.
- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. Interconnecting Transmission Owner’s and System Operator’s good faith estimate for the time of completion of the Optional Interconnection Study is [insert date].

The total estimated cost of the performance of the Optional Interconnection Study consists of \$\_\_\_\_\_ which is comprised of the System Operator’s estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner’s estimated cost of \$\_\_\_\_\_.

Any difference between the initial payment and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate. Upon receipt of the Optional Interconnection Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Optional Interconnection Study. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of invoice.

7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Optional Interconnection Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Optional Interconnection Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Optional Interconnection Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Optional Interconnection Study, the content of the Optional Interconnection Study, or the conclusions of the Optional Interconnection Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission

Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owners under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.



- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Optional Interconnection Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Optional Interconnection Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located, without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.

- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instances; rather, the same shall be and remain in full force and effect.
- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

Interconnecting Transmission Owner

By:

By:

Title:

Title:

Date:

Date:

[Insert name of Interconnection Customer]

By:

Title:

Date:

Attachment A

Appendix 5

Optional Interconnection

Study Agreement

**ASSUMPTIONS USED IN CONDUCTING  
THE OPTIONAL INTERCONNECTION STUDY**

[To be completed by Interconnection Customer consistent with Section 10 of the LGIP.]

**APPENDIX 6**  
**LARGE GENERATOR INTERCONNECTION**  
**AGREEMENT**

**TABLE OF CONTENTS**

Article 1	Definitions
Article 2	Effective Date, Term and Termination
Article 3	Regulatory Filings
Article 4	Scope of Service
Article 5	Interconnection Facilities Engineering, Procurement, and Construction
Article 6	Testing and Inspection
Article 7	Metering
Article 8	Communications
Article 9	Operations
Article 10	Maintenance
Article 11	Performance Obligation
Article 12	Invoice
Article 13	Emergencies
Article 14	Regulatory Requirements and Governing Law
Article 15	Notices
Article 16	Force Majeure
Article 17	Default
Article 18	Indemnity, Consequential Damages and Insurance
Article 19	Assignment
Article 20	Severability
Article 21	Comparability
Article 22	Confidentiality
Article 23	Environmental Releases
Article 24	Information Requirements
Article 25	Information Access and Audit Rights
Article 26	Subcontractors
Article 27	Disputes

Article 28	Representations, Warranties and Covenants
Article 29	Omitted
Article 30	Miscellaneous

## **THIS STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT**

("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnecting Transmission Owner"). Under this Agreement, the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a "Party" or collectively as the "Parties."

### **RECITALS**

**WHEREAS**, System Operator is the central dispatching agency provided for under the Transmission Operating Agreement ("TOA") which has responsibility for the operation of the New England Control Area from the System Operator control center and the administration of the Tariff; and

**WHEREAS**, Interconnecting Transmission Owner is the owner or possessor of an interest in the Administered Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this Agreement; and

**WHEREAS**, System Operator, Interconnection Customer and Interconnecting Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the Large Generating Facility to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this Standard Large Generator Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

## ARTICLE 1. DEFINITIONS

The definitions contained in this Article 1 and those definitions embedded in an Article of this Agreement are intended to apply in the context of the generator interconnection process provided for in Schedule 22 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of generator interconnections under Schedule 22. Capitalized terms in Schedule 22 that are not defined in this Article 1 shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF and, the Non-PTF, ~~and distribution facilities that are subject to the Tariff.~~

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.



**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**At-Risk Expenditure** shall mean money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (i) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and surveys, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** shall have the meaning specified in Section 2.3 of the Large Generator Interconnection Procedures (“LGIP”).

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability data bases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including

protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** shall mean that portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** shall mean the MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Large Generating Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

Confidential Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades associated with an Interconnection Request with a higher Queue Position or a transmission project that is planned or proposed for the New England Transmission System upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting

Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the Standard Large Generator Interconnection Agreement to possess black start capability.

**Engineering & Procurement ("E&P") Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a *et seq.*

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the

Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** shall mean a Transmission Owner that owns, leases or otherwise possesses an interest in, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Large Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Generating Facility with the Administered Transmission System under the Standard Large Generator Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** (a) shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of an existing Generating Facility; (iv) make a Material Modification to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System; (v) commence participation in the wholesale markets by an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service. Interconnection Request shall not include ~~:(i) a retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site; (ii) a request to interconnect a new Generating Facility to a distribution facility that is subject to the Tariff if the Generating Facility will not be used to make wholesale sales of electricity in interstate commerce; or (iii) a request to interconnect a Qualifying~~ Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** shall mean the service provided by System Operator and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement and, if applicable, the Tariff.



**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional Interconnection Study described in the Standard Large Generator Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other Affected System, the scope of which is described in Section 7 of the Standard Large Generator Interconnection Procedures. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a maximum gross capability at or above zero degrees F of more than 20 MW.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff..

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party's performance, or non-performance of its obligations under the Standard Large Generator Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2(a) of the Tariff.

**Material Modification** shall mean (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A (and Attachment A-1, if applicable) to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Initial Synchronization Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer's control; or (iv) except as provided in Section 3.2.3.4 of the LGIP, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6 of the LGIP, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard (“NC Interconnection Standard”)** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Resource (“NR”)** shall mean the portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** shall mean the MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s NR Interconnection Service shall be solely for the megawatt amount of the NR Capability requested pursuant to Section 3.1 of the LGIP. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Large Generating Facility to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Large Generator Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Standard Large Generator Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to Interconnecting Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Provisional Interconnection Service** shall mean Network Resource Interconnection Service provided by the System Operator, and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability from the Generating Facility at the Point of Interconnection on a limited and temporary basis, pursuant to the terms of the Provisional Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Provisional Large Generator Interconnection Agreement** shall mean the Interconnection Agreement for Provisional Interconnection Service established between the System Operator, the Interconnecting Transmission Owner, and the Interconnection Customer. This agreement shall take the form of the Standard Large Generator Interconnection Agreement, modified for provisional purposes.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric

systems, that impact the Administered Transmission System. References to a “higher-queued” Interconnection Request shall mean one that has been received by the System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as “lower-queued.”

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for which new interconnection is sought; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for which new interconnection is sought; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for which new interconnection is sought; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for which new interconnection is sought; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If the System Operator, Interconnecting Transmission Owner, and Interconnection Customer

disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the System Operator must provide the Interconnection Customer a written technical explanation outlining why the System Operator does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**Standard Large Generator Interconnection Agreement (“LGIA”)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, that is included in this Schedule 22 to the Tariff.

**Standard Large Generator Interconnection Procedures (“LGIP”)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in this Schedule 22 to the Tariff.

**Surplus Interconnection Service** shall mean a form of Interconnection Service that allows an Interconnection Customer to use any Unused Capability of Interconnection Service established in an Interconnection Agreement for an existing Generating Facility that has achieved Commercial Operation, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the same Point of Interconnection would remain the same.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this LGIP.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Unused Capability** shall mean: (i) in the case of NR Interconnection Service at an existing, commercial Generating Facility, the MW quantity as determined by the Original Interconnection Customer (as defined

in Section 3.3 of the LGIP), not to exceed the existing, commercial Generating Facility's NR Interconnection Service; and (ii) in the case of CNR Interconnection Service at an existing, commercial Generating Facility, for Summer, the Summer CNR Capability minus the latest Summer Qualified Capacity, and for Winter, the Winter CNR Capability minus the latest Winter Qualified Capacity.

## **ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION**

**2.1 Effective Date.** This LGIA shall become effective upon execution by the Parties subject to acceptance by the Commission (if applicable), or if filed unexecuted, upon the date specified by the Commission. System Operator and Interconnecting Transmission Owner shall promptly and jointly file this LGIA with the Commission upon execution in accordance with Section 11.3 of the LGIP and Article 3.1, if required.

**2.2 Term of Agreement.** This LGIA, subject to the provisions of Article 2.3, and by mutual agreement of the Parties, shall remain in effect for a period of \_\_\_\_\_ years from the Effective Date (*term to be specified in individual Agreement, but in no case should the term be less than ten (10) years from the Effective Date or such other longer period as the Interconnection Customer may request*) and shall be automatically renewed for each successive one-year period thereafter.

### **2.3 Termination Procedures.**

**2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer, subject to continuing obligations of this LGIA and the Tariff, after giving the System Operator and Interconnecting Transmission Owner ninety (90) Calendar Days advance written notice, or by System Operator or Interconnecting Transmission Owner notifying the Commission after a Generating Facility retires pursuant to the Tariff, provided that if an Interconnection Customer exercises its right to terminate on ninety (90) Calendar Days, any reconnection would be treated as a new interconnection request; or this LGIA may be terminated by Interconnecting Transmission Owner or System Operator by notifying the Commission after the Generating Facility permanently ceases Commercial Operation.

**2.3.2 Default.** Each Party may terminate this LGIA in accordance with Article 17.

Notwithstanding Articles 2.3.1 and 2.3.2, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing, if applicable, with the Commission of a notice of termination of this LGIA, which notice has been accepted for filing by the Commission. Termination of the LGIA shall not supersede or alter any requirements for deactivation or retirement of a generating unit under ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**2.4 Termination Costs.** If a Party elects to terminate this LGIA pursuant to Article 2.3 above, each Party shall pay all costs incurred (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by the other Party(ies), as of the date of such Party's(ies') receipt of such notice of termination, that are the responsibility of such Party(ies) under this LGIA. In the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this LGIA, unless otherwise ordered or approved by the Commission:

2.4.1 With respect to any portion of the Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades to the extent covered by this LGIA, that have not yet been constructed or installed, the Interconnecting Transmission Owner shall to the extent possible and with Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event Interconnection Customer elects not to authorize such cancellation, Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Interconnecting Transmission Owner shall deliver such material and equipment, and, if necessary, and to the extent possible, assign such contracts, to Interconnection Customer as soon as practicable, at Interconnection Customer's expense. To the extent that Interconnection Customer has already paid Interconnecting Transmission Owner for any or all such costs of materials or equipment not taken by Interconnection Customer, either (i) in the case of overpayment, Interconnecting Transmission Owner shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by the Interconnecting Transmission Owner to cancel any pending orders of or



return such materials, equipment, or contracts, or (ii) in the case of underpayment, Interconnection Customer shall promptly pay such amounts still due plus any costs, including penalties incurred by Interconnecting Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this LGIA, it shall be responsible for all costs incurred in association with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment, and other expenses including any Network Upgrades for which the Interconnecting Transmission Owner has incurred expenses and has not been reimbursed by the Interconnection Customer.

2.4.2 Interconnecting Transmission Owner may, at its option, retain any portion of such materials, equipment, or facilities that Interconnection Customer chooses not to accept delivery of, in which case Interconnecting Transmission Owner shall be responsible for all costs associated with procuring such materials, equipment, or facilities.

2.4.3 With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.

**2.5 Disconnection.** Upon termination of this LGIA, Interconnection Service shall terminate and, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Interconnecting Transmission Owner's Interconnection Facilities. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from a non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.

**2.6 Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Party(ies) pursuant to this

LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **ARTICLE 3. REGULATORY FILINGS**

- 3.1 Filing.** The System Operator and Interconnecting Transmission Owner shall jointly file this LGIA (and any amendment hereto) with the appropriate Governmental Authority, if required, in accordance with Section 11.3 of the LGIP. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the System Operator and Interconnecting Transmission Owner with respect to such filing and to provide any information reasonably requested by the System Operator and/or the Interconnecting Transmission Owner needed to comply with applicable regulatory requirements.

### **ARTICLE 4. SCOPE OF SERVICE**

- 4.1 Interconnection Product Options.** Interconnection Customer has selected the following (checked) type(s) of Interconnection Service:

Check: ☐ NR for NR Interconnection Service (NR Capability Only)

☐ CNR for CNR Interconnection Service (CNR Capability and NR Capability)

- 4.1.1 Capacity Network Resource Interconnection Service (CNR Interconnection Service).**

**4.1.1.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and the Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which all other Capacity Network Resources are interconnected under the CC

Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Large Generating Facility to be designated as a Capacity Network Resource, to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the net CNR Capability, or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as all other existing Capacity Network Resources, and to be studied as a Capacity Network Resource on the assumption that such a designation will occur.

#### **4.1.2 Network Resource Interconnection Service (NR Interconnection Service).**

**4.1.2.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which all other Network Resources are interconnected under the NC Interconnection Standard. NR Interconnection Service allows the Interconnection Customer's Large Generating Facility to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the gross and net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff. Notwithstanding the above, the portion of a Large Generating Facility that has been designated as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, unless pursuant to a new Interconnection Request for CNR Interconnection Service.

**4.2 Provision of Service.** System Operator and Interconnecting Transmission Owner shall provide Interconnection Service for the Large Generating Facility at the Point of Interconnection.

**4.3 Performance Standards.** Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such requirements and

standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the Interconnecting Transmission Owner, then that Party shall amend the LGIA and System Operator, in conjunction with the Interconnecting Transmission Owner, shall submit the amendment to the Commission for approval.

**4.4 No Transmission Delivery Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service, or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

**4.5 Transmission Delivery Service Implications.** CNR Interconnection Service and NR Interconnection Service allow the Interconnection Customer's Large Generating Facility to be designated by any Network Customer under the Tariff on the New England Transmission System as a Capacity Network Resource or Network Resource, up to the net CNR Capability or NR Capability, respectively, on the same basis as all other existing Capacity Network Resources and Network Resources interconnected to the New England Transmission System, and to be studied as a Capacity Network Resource or a Network Resource on the assumption that such a designation will occur. Although CNR Interconnection Service and NR Interconnection Service do not convey a reservation of transmission service, any Network Customer can utilize its network service under the Tariff to obtain delivery of capability from the Interconnection Customer's Large Generating Facility in the same manner as it accesses Capacity Network Resources and Network Resources. A Large Generating Facility receiving CNR Interconnection Service or NR Interconnection Service may also be used to provide Ancillary Services, in accordance with the Tariff and Market Rule 1, after technical studies and/or periodic analyses are performed with respect to the Large Generating Facility's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Capacity Network Resource or Network Resource. However, if an Interconnection Customer's Large Generating Facility has not been designated as a Capacity Network Resource or as a Network Resource by any load, it cannot be required

to provide Ancillary Services except to the extent such requirements extend to all Generating Facilities that are similarly situated.

CNR Interconnection Service and NR Interconnection Service do not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Large Generating Facility to any particular load on the New England Transmission System without incurring congestion costs. In the event of transmission constraints on the New England Transmission System, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures for the New England Transmission System in the same manner as other Capacity Network Resources or Network Resources.

There is no requirement either at the time of study or interconnection, or at any point in the future, that the Interconnection Customer's Large Generating Facility be designated as a Capacity Network Resource or as a Network Resource by a Network Service Customer under the Tariff or that the Interconnection Customer identify a specific buyer (or sink). To the extent a Network Customer does designate the Large Generating Facility as either a Capacity Network Resource or a Network Resource, it must do so pursuant to the Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining CNR Interconnection Service or NR Interconnection Service, as long as the Large Generating Facility has not been deemed to be retired, any future transmission service request for delivery from the Large Generating Facility on the New England Transmission System of any amount of capacity capability and/or energy capability will not require that any additional studies be performed or that any further upgrades associated with such Large Generating Facility be undertaken, regardless of whether or not such Large Generating Facility is ever designated by a Network Customer as a Capacity Network Resource or Network Resource, and regardless of changes in ownership of the Large Generating Facility. To the extent the Interconnection Customer enters into an arrangement for long-term transmission service for deliveries from the Large Generating Facility outside the New England Transmission System, or if the unit has been deemed to be retired, such

request may require additional studies and upgrades in order for Interconnecting Transmission Owner to grant such request.

**4.6 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.4. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

**ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING,  
PROCUREMENT, AND CONSTRUCTION**

**5.1 Options.** Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall specify the In-Service Date, Initial Synchronization Date, and Commercial Operation Date as specified in the Interconnection Request or as subsequently revised pursuant to Section 4.4 of the LGIP; and select either the Standard Option or Alternate Option set forth below, and such dates and selected option shall be set forth in Appendix B (Milestones). At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 below. If the dates designated by Interconnection Customer are not acceptable to Interconnecting Transmission Owner, Interconnecting Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days. Upon receipt of the notification that Interconnection Customer's designated dates are not acceptable to Interconnecting Transmission Owner, the Interconnection Customer shall notify Interconnecting Transmission Owner within thirty (30) Calendar Days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build. In accordance with Section 8 of the LGIP and unless otherwise mutually agreed, the Alternate Option is not an available option if the Interconnection Customer waived the Interconnection Facilities Study.

**5.1.1 Standard Option.** The Interconnecting Transmission Owner shall design, procure, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B (Milestones). The Interconnecting Transmission Owner shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Interconnecting Transmission Owner reasonably expects that it will not be able to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the specified dates, the Interconnecting Transmission Owner shall promptly provide written notice to the Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by Interconnection Customer are acceptable to Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities by the designated dates.

If Interconnecting Transmission Owner subsequently fails to complete Interconnecting Transmission Owner's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B (Milestones); Interconnecting Transmission Owner shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each day that the applicable System Operator refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of new Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2. The System Operator, Interconnecting Transmission Owner, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to the LGIA. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** If the dates designated by Interconnection Customer are not acceptable to Interconnecting Transmission Owner, the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives, or the procurement and construction of all facilities other than the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build under Article 5.1.3). If the Parties are unable to reach agreement on such



terms and conditions, then, pursuant to Article 5.1.1 (Standard Option), Interconnecting Transmission Owner shall assume responsibility for the design, procurement and construction of all facilities other than the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build.

**5.2 General Conditions Applicable to Option to Build.** If Interconnection Customer assumes responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall commit in the LGIA to a schedule for the completion of, and provide the System Operator evidence of proceeding with: (a) engineering and design of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades, (b) procurement of necessary equipment and ordering of long lead time material, and (c) construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(2) the Interconnection Customer shall engineer, procure equipment, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Interconnecting Transmission Owner;

(3) Interconnection Customer's engineering, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Interconnecting Transmission Owner would be subject in the engineering, procurement or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(4) Interconnecting Transmission Owner shall review and approve the engineering design, equipment acceptance tests, and the construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

- (5) prior to commencement of construction, Interconnection Customer shall provide to Interconnecting Transmission Owner any changes to the schedule for construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades reflected in Appendix B (Milestones), and shall promptly respond to requests for information from Interconnecting Transmission Owner;
- (6) at any time during construction, Interconnecting Transmission Owner shall have the right to gain unrestricted access to the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;
- (7) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Interconnecting Transmission Owner, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (8) the Interconnection Customer shall indemnify the Interconnecting Transmission Owner for claims arising from the Interconnection Customer's construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 (Indemnity);
- (9) the Interconnection Customer shall transfer control of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the Interconnecting Transmission Owner prior to the In-Service Date;
- (10) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner prior to the In-Service Date;
- (11) Interconnecting Transmission Owner shall approve and accept for operation and maintenance the Interconnecting Transmission Owner's Interconnection Facilities and Stand

Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2;

(12) Interconnection Customer shall deliver to Interconnecting Transmission Owner “as built” drawings, information, and any other documents that are reasonably required by Interconnecting Transmission Owner to assure that the Interconnection Facilities and Stand Alone Network Upgrades are built to the standards and specifications required by Interconnecting Transmission Owner; and

(13) Interconnection Customer shall pay Interconnecting Transmission Owner the agreed upon amount of [\$ PLACEHOLDER] for Interconnecting Transmission Owner to execute responsibilities enumerated to Interconnecting Transmission Owner under this Article 5.2. Interconnecting Transmission Owner shall invoice Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Article 12.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Interconnecting Transmission Owner’s Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Interconnecting Transmission Owner pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer’s fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Interconnecting Transmission Owner to the Interconnection Customer in the event that Interconnecting Transmission Owner does not complete any portion of the Interconnecting Transmission Owner’s Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Interconnecting Transmission Owner’s Interconnection Facilities and Network Upgrades, in the aggregate, for which Interconnecting Transmission Owner has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Interconnecting Transmission Owner’s Interconnection Facilities and Network Upgrades for which the Interconnecting Transmission Owner has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Interconnecting Transmission Owner

to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Interconnecting Transmission Owner's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the specified dates, unless the Interconnection Customer would have been able to commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Interconnecting Transmission Owner's delay; (2) the Interconnecting Transmission Owner's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other Interconnection Customer who has entered into an LGIA with the Interconnecting Transmission Owner or any cause beyond Interconnecting Transmission Owner's reasonable control or reasonable ability to cure, including, but not limited to, actions by the System Operator that cause delays and/or delays in licensing, permitting or consents where the Interconnecting Transmission Owner has pursued such licenses, permits or consents in good faith; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

**5.4 Power System Stabilizers.** If a Power System Stabilizer is required to be installed on the Large Generating Facility for the purpose of maintaining system stability, the Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with the guidelines and procedures established by the System Operator and Interconnecting Transmission Owner, and consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator and Interconnecting Transmission Owner reserve the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating

Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the System Operator and Interconnecting Transmission Owner, or their designated representative. The requirements of this paragraph shall not apply to non-synchronous power production equipment.

**5.5 Equipment Procurement.** If responsibility for construction of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades is to be borne by the Interconnecting Transmission Owner, then the Interconnecting Transmission Owner shall commence design of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The Interconnecting Transmission Owner has completed the Facilities Study pursuant to the Facilities Study Agreement;

**5.5.2** The Interconnecting Transmission Owner has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B (Milestones); and

**5.5.3** The Interconnection Customer has provided security to the Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).

**5.6 Construction Commencement.** The Interconnecting Transmission Owner shall commence construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

- 5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades;
- 5.6.3** The Interconnecting Transmission Owner has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B (Milestones); and
- 5.6.4** The Interconnection Customer has provided security to Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).
- 5.7 Work Progress.** The Interconnection Customer and the Interconnecting Transmission Owner shall keep each Party informed, by written quarterly progress reports, as to the progress of their respective design, procurement and construction efforts in order to meet the dates specified in Appendix B (Milestones). Any Party may also, at any other time, request a written progress report from the other Parties. If, at any time, the Interconnection Customer determines that the completion of the Interconnecting Transmission Owner's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer, upon the System Operator's approval that the change in the In-Service Date will not constitute a Material Modification pursuant to Section 4.4 of the LGIP, will provide written notice to the Interconnecting Transmission Owner of such later date upon which the completion of the Interconnecting Transmission Owner's Interconnection Facilities will be required.
- 5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with the New England Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Other Interconnection Options.**
- 5.9.1 Limited Operation.** If any of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the

Commercial Operation Date of the Large Generating Facility, System Operator and the Interconnecting Transmission Owner shall, upon the request and at the expense of Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Large Generating Facility and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. System Operator and Interconnecting Transmission Owner shall permit Interconnection Customer to operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**5.9.2 Provisional Interconnection Service.** Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities, System Operator and the Interconnecting Transmission Owner may execute a Provisional Large Generator Interconnection Agreement or Interconnection Customer may request the filing of an unexecuted Provisional Large Generator Interconnection Agreement with the Interconnection Customer for Provisional Interconnection Service at the discretion of System Operator and Interconnecting Transmission Owner based upon an evaluation that will consider the results of available studies. System Operator and Interconnecting Transmission Owner shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Large Generating Facility or the New England Transmission System. System Operator and Interconnecting Transmission Owner shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Large Generating Facility are in place prior to the commencement of Interconnection Service from the Large Generating Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities that are required for the interconnection of a new, modified and/or expanded Large Generating Facility are not currently in place, System Operator will perform a study, at the Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Large Generating Facility in the Provisional Large Generator

Interconnection Agreement shall be studied and updated each time the conditions assumed in the studies supporting the Provisional Interconnection Service change. Provisional Interconnection Service is an optional procedure and it will not alter the Interconnection Customer's Queue Position and associated cost and upgrade responsibilities. Interconnection Customer assumes all risk and liabilities with respect to changes between the Provisional Large Generator Interconnection Agreement and the Large Generator Interconnection Agreement, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities cost responsibilities.

**5.10 Interconnection Customer's Interconnection Facilities ("ICIF").** Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.10.1 Large Generating Facility Specifications.** Interconnection Customer shall submit initial specifications for the ICIF, including System Protection Facilities, to Interconnecting Transmission Owner at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. Interconnecting Transmission Owner shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Interconnecting Transmission Owner's Review.** Interconnecting Transmission Owner's review of Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the ICIF. Interconnection Customer shall make such changes to the ICIF as may reasonably be required by Interconnecting Transmission Owner, in accordance with Good Utility Practice, to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner.



**5.10.3 ICIF Construction.** The ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Interconnecting Transmission Owner “as-built” drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the Large Generating Facility and the ICIF, plan and elevation drawings showing the layout of the ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer’s step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the ICIF, and the impedances (determined by factory tests) for the associated step-up transformers and the Large Generating Facilities. The Interconnection Customer shall provide Interconnecting Transmission Owner specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

**5.11 Interconnecting Transmission Owner’s Interconnection Facilities Construction.** The Interconnecting Transmission Owner’s Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnecting Transmission Owner shall deliver to the Interconnection Customer the following “as-built” drawings, information and documents for the Interconnecting Transmission Owner’s Interconnection Facilities. The appropriate drawings and relay diagrams shall be included in Appendix A of this LGIA.

The System Operator will obtain operational control of the Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities pursuant to the TOA.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party (“Granting Party”) shall furnish at the incremental cost to another Party (“Access Party”) any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents if allowed under the applicable agency agreement, that are necessary to enable the Access Party solely to obtain

ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Administered Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the New England Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners.** If any part of the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall at Interconnection Customer's expense use Reasonable Efforts, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property. Notwithstanding the foregoing, the Interconnecting Transmission Owner shall not be obligated to exercise eminent domain authority in a manner inconsistent with Applicable Laws and Regulations or when an Interconnection Customer is authorized under Applicable Laws and Regulations to exercise eminent domain on its own behalf.

**5.14 Permits.** System Operator, Interconnecting Transmission Owner and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses, and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, Interconnecting Transmission Owner shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Interconnecting Transmission Owner's own, or an Affiliate's generation.

**5.15 Early Construction of Base Case Facilities.** Interconnection Customer may request Interconnecting Transmission Owner to construct, and Interconnecting Transmission Owner shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date,

all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Administered Transmission System, which are included in the Base Case of the Facilities Study for the Interconnection Customer, and which also are required to be constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date. The Interconnection Customer shall reimburse the Interconnecting Transmission Owner for all costs incurred related to early construction to the extent such costs are not recovered from other Interconnection Customers included in the base case.

- 5.16 Suspension.** Interconnection Customer reserves the right, upon written notice to Interconnecting Transmission Owner and System Operator, to suspend at any time all work by Interconnecting Transmission Owner associated with the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades required under this LGIA with the condition that the New England Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and the System Operator's and Interconnecting Transmission Owner's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Interconnecting Transmission Owner (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the New England Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Interconnecting Transmission Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Interconnecting Transmission Owner shall obtain Interconnection Customer's authorization to do so. Interconnecting Transmission Owner shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work by Interconnecting Transmission Owner required under this LGIA pursuant to this Article 5.16, and has not requested Interconnecting Transmission Owner to recommence the work required under this LGIA on or before the expiration of three (3) years following commencement of such suspension, this LGIA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Interconnecting Transmission Owner and System Operator, if no effective date is

specified. A suspension under this Article 5.16 does not automatically permit an extension of the In-Service Date, the Initial Synchronization Date or the Commercial Operation Date. A request for extension of such dates is subject to Section 4.4.5 of the LGIP. Notwithstanding the extensions permitted under Section 4.4.5 of the LGIP, the three-year period shall in no way result in an extension of the In-Service Date, the Initial Synchronization Date or the Commercial Operation Date that exceeds seven (7) years from the date of the Interconnection Request; otherwise, this LGIA shall be deemed terminated.

## **5.17 Taxes.**

**5.17.1 Payments Not Taxable.** The Parties intend that all payments or property transfers made by any Party for the installation of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations and Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the New England Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Interconnecting Transmission Owner for the Interconnecting Transmission Owner's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Interconnecting Transmission Owner's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended

to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Interconnecting Transmission Owner's request, Interconnection Customer shall provide Interconnecting Transmission Owner with a report from an independent engineer confirming its representation in clause (iii), above. Interconnecting Transmission Owner represents and covenants that the cost of the Interconnecting Transmission Owner's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon Interconnecting Transmission Owner.** Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Interconnecting Transmission Owner from the cost consequences of any current tax liability imposed against Interconnecting Transmission Owner as the result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this LGIA, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Interconnecting Transmission Owner.

The Interconnecting Transmission Owner shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges Interconnection Customer under this LGIA unless (i) Interconnecting Transmission Owner has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Interconnecting Transmission Owner to report payments or property as income subject to taxation; provided, however, that Interconnecting Transmission Owner may require Interconnection Customer to provide security, in a form reasonably acceptable to Interconnecting Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Interconnecting Transmission Owner for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty

(30) Calendar Days of receiving written notification from Interconnecting Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period, and the applicable statute of limitation, as it may be extended by the Interconnecting Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that Interconnection Customer will pay Interconnecting Transmission Owner, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Interconnecting Transmission Owner ("Current Taxes") on the excess of (a) the gross income realized by Interconnecting Transmission Owner as a result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Interconnecting Transmission Owner to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1). For this purpose, (i) Current Taxes shall be computed based on Interconnecting Transmission Owner composite federal and state tax rates at the time the payments or property transfers are received and Interconnecting Transmission Owner will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Interconnecting Transmission Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Interconnecting Transmission Owner current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} -$

Present Value of Tax Depreciation))/(1-Current Tax Rate). Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At Interconnection Customer's request and expense, Interconnecting Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Interconnecting Transmission Owner under this LGIA are subject to federal income taxation. Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Interconnecting Transmission Owner and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Interconnecting Transmission Owner shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Interconnecting Transmission Owner shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within ten (10) years from the date on which the relevant Interconnecting Transmission Owner's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenant contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and Interconnecting Transmission Owner retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on Interconnecting Transmission Owner, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that Interconnecting Transmission Owner's receipt of payments or property constitutes income that is subject to taxation, Interconnecting Transmission Owner shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Interconnecting Transmission Owner may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Interconnecting Transmission Owner may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Interconnecting Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Interconnecting Transmission Owner shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Interconnecting Transmission Owner may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Interconnecting Transmission Owner, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement without Interconnection Customer's consent or such written advice will relieve



Interconnection Customer from any obligation to indemnify Interconnecting Transmission Owner for the tax at issue in the contest.

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to Interconnecting Transmission Owner which holds that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Interconnecting Transmission Owner in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this LGIA is not taxable to Interconnecting Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Interconnecting Transmission Owner are not subject to federal income tax, or (d) if Interconnecting Transmission Owner receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Interconnecting Transmission Owner pursuant to this LGIA, Interconnecting Transmission Owner shall promptly refund to Interconnection Customer the following:

- (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
- (ii) interest on any amounts paid by Interconnection Customer to Interconnecting Transmission Owner for such taxes which Interconnecting Transmission Owner did not submit to the taxing authority, interest calculated in accordance with the methodology set forth in the Commission's regulations at 18 CFR §35.19a(a)(2)(iii) from the date payment was made by Interconnection Customer to the date Interconnecting Transmission Owner refunds such payment to Interconnection Customer, and

(iii) with respect to any such taxes paid by Interconnecting Transmission Owner, any refund or credit Interconnecting Transmission Owner receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Interconnecting Transmission Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Interconnecting Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Interconnecting Transmission Owner will remit such amount promptly to Interconnection Customer only after and to the extent that Interconnecting Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Interconnecting Transmission Owner's Interconnection Facilities.

The intent of this provision is to leave Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Interconnecting Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Interconnecting Transmission Owner for which Interconnection Customer may be required to reimburse Interconnecting Transmission Owner under the terms of this LGIA. Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, Interconnecting Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Interconnecting Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Interconnection Customer to Interconnecting Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of

competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Interconnecting Transmission Owner.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Party's(ies') tax status. Nothing in this LGIA is intended to adversely affect any Interconnecting Transmission Owner's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** Either Interconnection Customer or Interconnecting Transmission Owner may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, the facilities of any Affected Parties, or the New England Transmission System, that Party shall provide to the other Parties and any Affected Party: (i) sufficient information regarding such modification so that the other Party(ies) may evaluate the potential impact of such modification prior to commencement of the work; and (ii) such information as may be required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party(ies) at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed. Notwithstanding the foregoing, no Party shall be obligated to proceed with a modification that would constitute a Material Modification and therefore require an Interconnection Request under the LGIP, except as provided under and pursuant to the LGIP.

In the case of Large Generating Facility or Interconnection Customer's Interconnection Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Interconnecting Transmission Owner shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.

**5.19.3 Modification Costs.** Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Interconnecting Transmission Owner makes to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System to facilitate the interconnection of a third party to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System, or to provide transmission service to a third party under the Tariff, except as provided for under the Tariff or any other applicable tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Large Generating Facility or Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## **ARTICLE 6. TESTING AND INSPECTION**

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Interconnecting Transmission Owner shall test Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation.

Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. Interconnection Customer shall bear the cost of all such testing and modifications. Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

- 6.2 Post-Commercial Operation Date Testing and Modifications.** Each Interconnection Customer and Interconnecting Transmission Owner shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, as may be necessary to ensure the continued interconnection of the Large Generating Facility to the Administered Transmission System in a safe and reliable manner. The Interconnection Customer and Interconnecting Transmission Owner each shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's(ies') facilities, at the requesting Party's expense, as may be in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator shall also have the right to require reasonable additional testing of the other Party's (ies') facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 6.3 Right to Observe Testing.** Each Party shall notify the System Operator and other Party(ies) in advance of its performance of tests of its Interconnection Facilities. The other Party(ies) has the right, at its own expense, to observe such testing.
- 6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe the other Party's(ies') tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of the other Party's(ies') System Protection Facilities and other protective equipment; and (iii) review the other Party's(ies') maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. Each Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to

the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be governed by Article 22.

## ARTICLE 7. METERING

- 7.1 General.** Each Party shall comply with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding metering. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment. Unless the System Operator otherwise agrees, the Interconnection Customer shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and energy being transmitted under this Tariff and to communicate the information to the System Operator. Unless otherwise agreed, such equipment shall remain the property of the Interconnecting Transmission Owner.
- 7.2 Check Meters.** Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check Interconnecting Transmission Owner's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except as provided in Article 7.4 below. The check meters shall be subject at all reasonable times to inspection and examination by Interconnecting Transmission Owner or its designee. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Standards.** Interconnecting Transmission Owner shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards and the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 7.4 Testing of Metering Equipment.** Interconnecting Transmission Owner shall inspect and test all Interconnecting Transmission Owner-owned Metering Equipment upon installation and thereafter as specified in the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnecting Transmission Owner shall give reasonable notice of the time when any inspection or test shall take place, and Interconnection Customer may have representatives present at the test or inspection. If at any time Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced at Interconnection Customer's expense, in order to provide accurate metering. If Metering Equipment fails to register, or if the

measurement made by Metering Equipment during a test varies by more than the values specified within ISO New England Operating Documents, or successor documents, from the measurement made by the standard meter used in the test, the Interconnecting Transmission Owner shall adjust the measurements, in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 7.5 Metering Data.** At Interconnection Customer's expense, metered data shall be telemetered to one or more locations designated by System Operator and Interconnecting Transmission Owner. The hourly integrated metering, established in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, used to transmit Megawatt hour ("MWh") per hour data by electronic means and the Watt-hour meters equipped with kilowatt-hour ("kwh") or MWh registers to be read at month's end shall be the official measurement of the amount of energy delivered from the Large Generating Facility to the Point of Interconnection. Instantaneous metering is required for all Generators in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 8. COMMUNICATIONS**

- 8.1 Interconnection Customer Obligations.** Interconnection Customer shall maintain satisfactory operating communications with the System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of the Large Generating Facility, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Interconnection Customer or Interconnecting Transmission Owner at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by System Operator and Interconnecting Transmission Owner through use of a dedicated point-to-point data circuit(s). The communication protocol for the data circuit(s) shall be specified by System Operator and Interconnecting Transmission Owner. All information required by the ISO New England Operating Documents, or successor documents, must be telemetered directly to the location(s) specified by System Operator and Interconnecting Transmission Owner.



Each Party will promptly advise the other Party(ies) if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party(ies). The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

- 8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## **ARTICLE 9. OPERATIONS**

- 9.1 General.** Each Party shall comply with applicable provisions of ISO New England Operating Documents, Reliability Standards, or successor documents, regarding operations. Each Party shall provide to the other Party(ies) all information that may reasonably be required by the other Party(ies) to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Control Area Notification.** Before Initial Synchronization Date, the Interconnection Customer shall notify the System Operator and Interconnecting Transmission Owner in writing in accordance with ISO New England Operating Documents, Reliability Standards, or successor documents. If the Interconnection Customer elects to have the Large Generating Facility dispatched and operated from a remote Control Area other than the Control Area in which the Large Generating Facility is physically located, and if permitted to do so by the relevant transmission tariffs and ISO New England Operating Documents, Reliability Standards, or successor documents, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Control Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Control Area for dispatch and operations.
- 9.3 Interconnecting Transmission Owner and System Operator Obligations.** Interconnecting Transmission Owner and System Operator shall cause the Interconnecting Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA and ISO New England Operating Documents, Reliability

Standards, or successor documents. Interconnecting Transmission Owner or System Operator may provide operating instructions to Interconnection Customer consistent with this LGIA, ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Interconnecting Transmission Owner's and System Operator's operating protocols and procedures as they may change from time to time. Interconnecting Transmission Owner and System Operator will consider changes to their operating protocols and procedures proposed by Interconnection Customer.

**9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA and ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.5 Start-Up and Synchronization.** The Interconnection Customer is responsible for the proper start-up and synchronization of the Large Generating Facility to the New England Transmission System in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6 Reactive Power and Primary Frequency Response.**

**9.6.1 Power Factor Design Criteria.**

**9.6.1.1 Synchronous Generation.** Interconnection Customer shall design the Large Generating Facility and all generating units comprising the Large Generating Facility, as applicable, to maintain a composite power delivery at continuous rated power output at the Point of Interconnection with dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, unless the System Operator or Interconnecting Transmission Owner has established different requirements that apply to all synchronous (and non-wind non-synchronous generators as specified in Appendix G, Section A.ii.4 to the LGIA) generators in the Control Area on a comparable basis and in accordance with ISO

New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6.1.2 Non-Synchronous Generation.** The power factor design criteria requirements applicable to non-synchronous Generating Facilities shall be as specified in in Appendix G to the LGIA. The Low Voltage Ride-Through Capability requirements applicable to wind and inverter-based Generating Facilities shall be as specified in Appendix G to the LGIA.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has synchronized the Large Generating Facility to the New England Transmission System, Interconnection Customer shall operate the Large Generating Facility at the direction of System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding voltage schedules in accordance with such requirements.

**9.6.2.1 Voltage Regulators.** The Interconnection Customer must keep and maintain a voltage regulator on all generating units comprising a Large Generating Facility in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. All Interconnection Customers that have, or are required to have, automatic voltage regulation shall normally operate the Large Generating Facility with its voltage regulators in automatic operation.

It is the responsibility of the Interconnection Customer to maintain the voltage regulator in good operating condition and promptly report to the System Operator and Interconnecting Transmission Owner any problems that could cause interference with its proper operation.

**9.6.2.2 System Protection.** The Interconnection Customer shall install and maintain protection systems in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

#### **9.6.3 Payment for Reactive Power.**

Interconnection Customers shall be compensated for Reactive Power service in accordance with Schedule 2 of the Section II of the Tariff.

#### **9.6.4 Primary Frequency Response.**

Interconnection Customer with an Interconnection System Impact Study that commenced on or after May 15, 2018 shall ensure the primary frequency response capability of its Large Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Large Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Large Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Large Generating Facility’s real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Large Generating Facility’s real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify System Operator and Interconnecting Transmission Owner that the primary frequency response capability of the Large Generating Facility has been tested and

confirmed during commissioning. Once Interconnection Customer has synchronized the Large Generating Facility with the New England Transmission System, Interconnection Customer shall operate the Large Generating Facility consistent with the provisions specified in Articles 9.6.4.1 and 9.6.4.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Large Generating Facilities.

**9.6.4.1 Governor or Equivalent Controls.** Whenever the Large Generating Facility is operated in parallel with the New England Transmission System, Interconnection Customer shall operate the Large Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with System Operator and Interconnecting Transmission Owner, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to System Operator and Interconnecting Transmission Owner upon request. If Interconnection Customer needs to operate the Large Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify System Operator and Interconnecting Transmission Owner, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Large Generating Facility's governor or equivalent controls to a minimum whenever the Large Generating Facility is operated in parallel with the New England Transmission System.

**9.6.4.2 Timely and Sustained Response.** Interconnection Customer shall ensure that the Large Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Large Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Large Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

**9.6.4.3 Exemptions.** Large Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Articles 9.6.4, 9.6.4.1, and 9.6.4.2 of this Agreement. Large Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Article 9.6.4, but shall be otherwise exempt from the operating requirements in Articles 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.4 of this Agreement.

**9.6.4.4 Electric Storage Resources.** Interconnection Customer interconnecting a Large Generating Facility that is an electric storage resource shall establish an operating range in Appendix C of its LGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set

forth in Articles 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.3 of this Agreement. Appendix C shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by System Operator, Interconnecting Transmission Owner and Interconnection Customer. If the operating range is dynamic, then Appendix C must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Article 9.6.4.2 of this Agreement when it is online and dispatched to inject electricity to the New England Transmission System and/or receive electricity from the New England Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the New England Transmission System and/or dispatched to receive electricity from the New England Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

## **9.7 Outages and Interruptions.**

### **9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** The System Operator shall have the authority to coordinate facility outages in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Each Party may in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, in coordination with the other Party(ies), remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's(ies') facilities as necessary to perform maintenance or testing or to install or replace equipment, subject to the oversight of System Operator in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.1.2 Outage Schedules.** Outage scheduling, and any related compensation, shall be in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.2 Interruption of Service.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, the System Operator or Interconnecting Transmission Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect System Operator's or Interconnecting Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the New England Transmission System.

**9.7.3 Under-Frequency and Over Frequency Conditions.** Interconnection Customer shall implement under-frequency and over-frequency relay set points for the Large Generating Facility as required by the applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with System Operator and Interconnecting Transmission Owner in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.



#### **9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnecting Transmission Owner shall install at Interconnection Customer's expense, in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, any System Protection Facilities that may be required on the Interconnecting Transmission Owner Interconnection Facilities or the New England Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** Each Party's protection facilities shall be designed and coordinated with other systems in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.3** Each Party shall be responsible for protection of its facilities consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.4** Each Party's protective relay design shall allow for tests required in Article 6.

**9.7.4.5** Each Party will test, operate and maintain System Protection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.5 Requirements for Protection.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and compliance with Good Utility Practice, Interconnection Customer shall provide, install, own, and

maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the New England Transmission System not otherwise isolated by Interconnecting Transmission Owner's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the New England Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Large Generating Facility and the New England Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. Interconnection Customer shall be responsible for protection of the Large Generating Facility and Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and Interconnection Customer's other equipment if conditions on the New England Transmission System could adversely affect the Large Generating Facility.

**9.7.6 Power Quality.** A Party's facilities shall not cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard.

**9.8 Switching and Tagging Rules.** Each Party shall provide the other Party(ies) with a copy of its switching and tagging rules that are applicable to the other Party's activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large

Generating Facility to the Administered Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Interconnecting Transmission Owner's Interconnection Facilities, or any part thereof, Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to the Commission for resolution.

**9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the New England Transmission System by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 10. MAINTENANCE**

**10.1 Interconnecting Transmission Owner and Customer Obligations.** Interconnecting Transmission Owner and Interconnection Customer shall each maintain that portion of its respective facilities that are part of the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities in a safe and reliable manner

and in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 10.2 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of Interconnecting Transmission Owner's Interconnection Facilities, Stand Alone Network Upgrades, Network Upgrades and Distribution Upgrades.

## **ARTICLE 11. PERFORMANCE OBLIGATION**

- 11.1 Interconnection Customer's Interconnection Facilities.** Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at its sole expense.
- 11.2 Interconnecting Transmission Owner's Interconnection Facilities.** Interconnecting Transmission Owner shall design, procure, construct, install, own and/or control the Interconnecting Transmission Owner's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at the sole expense of the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.** Interconnecting Transmission Owner shall design, procure, construct, install, and own the Network Upgrades, and to the extent provided by Article 5.1, Stand Alone Network Upgrades, and Distribution Upgrades described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades). The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Interconnecting Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by the Interconnection Customer.

#### **11.4 Cost Allocation; Compensation; Rights; Affected Systems**

**11.4.1 Cost Allocation.** Cost allocation of Generator Interconnection Related Upgrades shall be in accordance with Schedule 11 of Section II of the Tariff.

**11.4.2 Compensation.** Any compensation due to the Interconnection Customer for increases in transfer capability to the PTF resulting from its Generator Interconnection Related Upgrade shall be determined in accordance with Sections II and III of the Tariff.

**11.4.3 Rights.** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades.

**11.4.4 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into separate related facilities agreements to address any upgrades to the Affected System(s) that are necessary for safe and reliable interconnection of the Interconnection Customer's Generating Facility.

**11.5 Provision of Security.** At least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of an Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Interconnecting Transmission Owner a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Interconnecting Transmission Owner in accordance with Section 7 of Schedule 11 of the Tariff. In addition:

**11.5.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Interconnecting Transmission Owner, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

**11.5.2** The letter of credit must be issued by a financial institution reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.5.3** The surety bond must be issued by an insurer reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.6 Interconnection Customer Compensation.** If System Operator or Interconnecting Transmission Owner requests or directs Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power), or 13.4.1 of this LGIA, Interconnection Customer shall be compensated pursuant to the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.** Interconnection Customer shall be compensated for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the New England Transmission System during an Emergency Condition in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 12. INVOICE**

**12.1 General.** Each Party shall submit to the other Party(ies), on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party(ies) under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**12.2 Final Invoice.** Within six months after completion of the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, Interconnecting Transmission Owner shall provide an invoice of the final cost of the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades and

shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates.

Interconnecting Transmission Owner shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice. Interconnection Customer shall pay to Interconnecting Transmission Owner any amount by which the actual payment by Interconnection Customer for estimated costs falls short of the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

**12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by any Party will not constitute a waiver of any rights or claims the other Party(ies) may have under this LGIA.

**12.4 Disputes.** In the event of a billing dispute between Interconnecting Transmission Owner and Interconnection Customer, Interconnecting Transmission Owner shall continue to provide Interconnection Service under this LGIA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Interconnecting Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet these two requirements for continuation of service, then Interconnecting Transmission Owner may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accord with the methodology set forth in the Commission's Regulations at 18 CFR § 35.19a(a)(2)(iii).

## **ARTICLE 13. EMERGENCIES**

**13.1 Obligations.** Each Party shall comply with the Emergency Condition procedures of the System Operator in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**13.2 Notice.** Interconnecting Transmission Owner or System Operator as applicable shall notify Interconnection Customer and System Operator or Interconnecting Transmission Owner as applicable, promptly when it becomes aware of an Emergency Condition that affects the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Interconnecting Transmission Owner and System Operator promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of Interconnection Customer's or Interconnecting Transmission Owner's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.

**13.3 Immediate Action.** Unless, in Interconnection Customer's reasonable judgment, immediate action is required, Interconnection Customer shall obtain the consent of Interconnecting Transmission Owner and System Operator, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by the Interconnecting Transmission Owner or the System Operator or otherwise regarding the New England Transmission System.

**13.4 System Operator's and Interconnecting Transmission Owner's Authority.**

**13.4.1 General.** System Operator or Interconnecting Transmission Owner may take whatever actions or inactions with regard to the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities it deems necessary



during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the New England Transmission System or Interconnecting Transmission Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. System Operator and Interconnecting Transmission Owner may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.4.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of System Operator's and Interconnecting Transmission Owner's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.4.2 Reduction and Disconnection.** System Operator and Interconnecting Transmission Owner may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. These rights are separate and distinct from any right of curtailment of the System Operator and Interconnecting Transmission Owner pursuant to the Tariff. When the System Operator and Interconnecting Transmission Owner can schedule the reduction or disconnection in advance, System Operator and Interconnecting Transmission Owner shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction

or disconnection. System Operator and Interconnecting Transmission Owner shall coordinate with the Interconnection Customer in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the System Operator and Interconnecting Transmission Owner. Any reduction or disconnection shall continue only for so long as reasonably necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the New England Transmission System to their normal operating state as soon as practicable in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**13.5 Interconnection Customer Authority.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents and the LGIA and the LGIP, the Interconnection Customer may take whatever actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities. System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.6 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, a Party shall not be liable to another Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**

**14.1 Regulatory Requirements.** Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended. To the extent that a condition arises that could result in Interconnection Customer's inability to obtain, or its loss of, status or exemption under the Federal Power Act, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, the Parties shall engage in good faith negotiations to address the condition so that such result will not occur and so that this LGIA can be performed.

**14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This LGIA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

**ARTICLE 15. NOTICES**

**15.1 General.** Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered

mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F (Addresses for Delivery of Notices and Billings).

A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change.

**15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.** Each Party shall notify the other Party(ies) in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **ARTICLE 16. FORCE MAJEURE**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** A Party shall not be considered to be in Default with respect to any obligation hereunder (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party(ies) in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall

exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **ARTICLE 17. DEFAULT**

### **17.1 Default.**

**17.1.1 General.** No Breach shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party(ies). Upon a Breach, the non-Breaching Party shall give written notice of such Breach to the breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the non-Breaching Party(ies) shall have the right to terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not those Parties terminate this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which they are entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

## **ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

Notwithstanding any other provision of this Agreement, the liability, indemnification and insurance provisions of the Transmission Operating Agreement (“TOA”) or other applicable

operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner and the liability, indemnification and insurance provisions of the Tariff apply to the relationship between the System Operator and the Interconnection Customer and between the Interconnecting Transmission Owner and the Interconnection Customer.

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and save the other Party(ies) harmless from any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's(ies') action or inactions of their obligations under this LGIA on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by an indemnified Party.

**18.1.1 Indemnified Person.** If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Person may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

The Indemnified Person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the Indemnifying Party, in which event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be reasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Other than the Liquidated Damages heretofore described, in no event shall a Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** The Interconnecting Transmission Owner and the Interconnection Customer shall, at their own expense, maintain in force throughout the period of this LGIA, and until released by the other Party(ies), the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death, and property damage.

**18.3.3** Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

**18.3.4** Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

**18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party(ies), its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall



contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

**18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.

**18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

**18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.

**18.3.9** Within ten (10) days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.

**18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program, provided that such Party's senior secured debt is rated at

investment grade, or better, by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article, it shall notify the other Party(ies) that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

## **ARTICLE 19. ASSIGNMENT**

**19.1 Assignment.** This LGIA may be assigned by any Party only with the written consent of the other Parties; provided that the Parties may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the Interconnecting Transmission Owner or System Operator, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the Interconnecting Transmission Owner and System Operator of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the Interconnecting Transmission Owner and System Operator of the date and particulars of any such exercise of assignment right(s), including providing the Interconnecting Transmission Owner with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations,

nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **ARTICLE 20. SEVERABILITY**

- 20.1 Severability.** If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Interconnecting Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **ARTICLE 21. COMPARABILITY**

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **ARTICLE 22. CONFIDENTIALITY**

- 22.1 Confidentiality.** Confidential Information shall include, without limitation, all information governed by the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by a Party, the other Party(ies) shall provide, in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of the LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party(ies) that it no longer is confidential.

**22.1.3 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or are considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with

such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under this LGIA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Governmental Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party(ies), use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party(ies)) or return to the other Party(ies), without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party(ies).

**22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Parties shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR. section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) to this LGIA prior to the release of the Confidential Information to the Commission or its staff. The Party

shall notify the other Party(ies) to the LGIA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this LGIA (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Parties’ Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

**23.1** Each Party shall notify the other Party(ies), first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party(ies). The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the

notice no later than twenty-four (24) hours after such Party becomes aware of the occurrence; and  
(ii) promptly furnish to the other Party(ies) copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **ARTICLE 24. INFORMATION REQUIREMENTS**

**24.1 Information Acquisition.** Subject to any applicable confidentiality restrictions, including, but not limited to, codes of conduct, each Party shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by System Operator and Interconnecting Transmission Owner.** The initial information submission by System Operator and Interconnecting Transmission Owner shall occur no later than one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date and shall include information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise mutually agreed to by the Parties. On a monthly basis Interconnecting Transmission Owner shall provide Interconnection Customer a status report on the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date. Interconnection Customer shall submit a completed copy of the Large Generating Facility data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to Interconnecting Transmission Owner and System Operator for the Interconnection Feasibility Study, Interconnection System Impact Study and Interconnection Facilities Study. Information in this submission shall be the most current Large Generating Facility design or expected performance data. Information submitted for stability models shall be



compatible with Interconnecting Transmission Owner and System Operator standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is different from what was originally provided to Interconnecting Transmission Owner pursuant to the Interconnection Study Agreement between Interconnecting Transmission Owner and Interconnection Customer, then the System Operator will review it and conduct appropriate studies, as needed, at the Interconnection Customer's cost, to determine the impact on the New England Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

**24.4 Information Supplementation.** Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Large Generating Facility information and "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Large Generating Facility as required by Good Utility Practice such as an open circuit "step voltage" test on the Large Generating Facility to verify proper operation of the Large Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Large Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent change in Large Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of Large Generating Facility terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Large Generating Facility's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Large Generating Facility terminal or field voltages is provided. Large Generating Facility testing shall be conducted and results provided to the Interconnecting Transmission Owner for each individual generating unit in a station.

The Interconnection Customer shall provide the Interconnecting Transmission Owner and System Operator with any information changes due to proposed equipment replacement, repair, or adjustment. Interconnecting Transmission Owner shall provide the Interconnection Customer and System Operator with any information changes due to proposed equipment replacement, repair or adjustment in the directly connected substation or any adjacent Interconnecting Transmission Owner-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information in accordance with Article 5.19 of this Agreement.

## **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

- 25.1 Information Access.** Each Party (the “disclosing Party”) shall make available to the other Parties information that is in the possession of the disclosing Party and is necessary in order for the other Party(ies) to: (i) verify the costs incurred by the disclosing Party for which the other Party(ies) are responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA.
- 25.2 Reporting of Non-Force Majeure Events.** Each Party (the “notifying Party”) shall notify the other Party(ies) when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory Breach of this LGIA.
- 25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the other Party(ies), to audit at its own expense the other Party's(ies') accounts and records pertaining to a Party's performance or a Party's satisfaction of obligations under this LGIA. Such audit rights shall include audits of the other Party's(ies') costs, calculation of invoiced amounts, the efforts to allocate responsibility for the provision of reactive support to the New England

Transmission System, the efforts to allocate responsibility for interruption or reduction of generation on the New England Transmission System, and each Party's actions in an Emergency Condition. Any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party's performance and satisfaction of obligations under this LGIA. Each Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

#### **25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four (24) months following Interconnecting Transmission Owner's issuance of a final invoice in accordance with Article 12.2.

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four (24) months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four (24) months after the event for which the audit is sought.

**25.5 Audit Results.** If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party(ies) together with those records from the audit which support such determination.

### **ARTICLE 26. SUBCONTRACTORS**

**26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided,

however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party(ies) for the performance of such subcontractor.

**26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Party(ies) for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **ARTICLE 27. DISPUTES**

**27.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party(ies) with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's(ies') receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

**27.2 External Arbitration Procedures.** Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single

arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail

**27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel; or (2) a pro rata share of the cost of a single arbitrator chosen by the Parties.

## **ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS**

**28.1 General.** Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

## **ARTICLE 29. [OMITTED]**

## **ARTICLE 30. MISCELLANEOUS**

- 30.1 Binding Effect.** This LGIA and the rights and obligations hereof shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation.** This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix of this LGIA, or such Section of the LGIP or such Appendix of the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 30.4 Entire Agreement.** Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, this LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this LGIA. Except for the ISO New England Operating Documents, Applicable Reliability Standards, any

applicable tariffs, related facilities agreements, or successor documents, there are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.

**30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

**30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by a Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Interconnecting Transmission Owner. Any waiver of this LGIA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

**30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment.** The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by the Parties.



**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** Consistent with Section 11.3 of the LGIP, Interconnecting Transmission Owner and System Operator shall have the right to make unilateral filings with the Commission to modify this LGIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Parties and to participate fully in any proceeding before the Commission in which such modifications may be considered. In the event of disagreement on terms and conditions of the LGIA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the Federal Power Act shall apply only to Interconnecting Transmission Owner's position on such terms and conditions. Nothing in this LGIA shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Parties.

**IN WITNESS WHEREOF**, the Parties have executed this LGIA in triplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

**ISO New England Inc. (System Operator)**

By:

Title:

Date:

**[*Insert Name of*] (Interconnecting Transmission Owner)**

By:

Title:

Date:

**[*Insert name of*] (Interconnection Customer)**

By:

Title:

Date:

## **APPENDICES TO LGIA**

Appendix A	Interconnection Facilities, Network Upgrades and Distribution Upgrades
Appendix B	Milestones
Appendix C	Interconnection Details
Appendix D	Security Arrangements Details
Appendix E	Commercial Operation Date
Appendix F	Addresses for Delivery of Notices and Billings
Appendix G	Interconnection Requirements for a Wind Generating Plant

## APPENDIX A TO LGIA

### Interconnection Facilities, Network Upgrades and Distribution Upgrades

#### 1. Interconnection Facilities:

- a. **Point of Interconnection and Point of Change of Ownership.** The Point of Interconnection shall be at the point where *[insert description of location]*. See Appendix A-*[insert]*, which drawing is attached hereto and made part hereof.

The Point of Change of Ownership shall be at the point where *[insert description of location]*. See Appendix A – *[insert]*, which drawing is attached hereto and made part hereof.

If not located at the Point of Interconnection, the metering point(s) shall be located at: *[insert location]*.

- b. **Interconnection Customer's Interconnection Facilities (including metering equipment).** The Interconnection Customer shall construct *[insert Interconnection Customer's Interconnection Facilities]*. See Appendix A-*[insert]*.
- c. **Interconnecting Transmission Owner's Interconnection Facilities (including metering equipment).** The Interconnecting Transmission Owner shall construct *[insert Interconnecting Transmission Owner's Interconnection Facilities, including any Cluster Enabling Transmission Upgrades]*. See Appendix –*[insert]*.

#### 2. Network Upgrades:

- a. **Stand Alone Network Upgrades.** *[insert Stand Alone Network Upgrades]*.
- b. **Other Network Upgrades.** *[insert Other Network Upgrades, including any Cluster Enabling Transmission Upgrades]*.

3. **Distribution Upgrades.** *[insert Distribution Upgrades]*
4. **Affected System Upgrades.** *[insert Affected System Upgrades]*
5. **Long Lead Facility-Related Upgrades.**

The Interconnection Customer's Large Generating Facility is associated with a Long Lead Facility, in accordance with Section 3.2.3 of the LGIP. Pursuant to Section 4.1 of the LGIP, the Interconnection Customer shall be responsible for the following upgrades in the event that the Long Lead Facility achieves Commercial Operation and obtains a Capacity Supply Obligation in accordance with Section III.13.1 of the Tariff:

*[insert list of upgrades]*

If the Interconnection Customer fails to cause these upgrades to be in-service prior to the commencement of the Long Lead Facility's Capacity Commitment Period, the Interconnection Customer shall be deemed to be in Breach of this LGIA in accordance with Article 17.1, and the System Operator will initiate all necessary steps to terminate this LGIA, in accordance with Article 2.3.

6. **Contingent Facilities:** *[insert list of Contingent Facilities]*
7. **Post-Forward Capacity Auction Re-study Upgrade Obligations.** *[insert any change in upgrade obligations that result from re-study conducted post receiving a Capacity Supply Obligation through a Forward Capacity Auction.]*



## APPENDIX B TO LGIA

### Milestones

- 1. Selected Option Pursuant to Article 5.1:** Interconnection Customer selects the *[insert]*.  
Options as described in Articles 5.1.*[insert]*, 5.1.*[insert]*, and 5.1.*[insert]* shall not apply to this LGIA.
- 2. Milestones and Other Requirements for all Large Generating Facilities:** The description and entries listed in the following table establish the required Milestones in accordance with the provisions of the LGIP and this LGIA. The referenced section of the LGIP or article of the LGIA should be reviewed by each Party to understand the requirements of each milestone.

Item No.	Milestone Description	Responsible Party	Date	LGIP/LGIA Reference
1	Provide evidence of continued Site Control to System Operator, or \$250,000 non-refundable deposit to Interconnecting Transmission Owner	Interconnection Customer	Within 15 BD of final LGIA receipt	§ 11.3.1.1 of LGIP
2	Provide evidence of one or more milestones specified in § 11.3 of LGIP	Interconnection Customer	Within 15 BD of final LGIA receipt	§ 11.3.1.2 of LGIP
3	Commit to a schedule for payment of upgrades	Interconnection Customer	Within 15 BD of final LGIA receipt	§ 11.3.1.2 of LGIP
4	Provide either (1) evidence of Major Permits or (2) refundable deposit to Interconnecting Transmission Owner	Interconnection Customer	If (1) Within 15 BD of final LGIA receipt or if (2) At time of LGIA execution	§ 11.3.1.2 of LGIP
5	Provide certificate of insurance	Interconnection Customer and Interconnecting	Within 10 Calendar Days of execution of LGIA	§ 18.3.9 of LGIA

		Transmission Owner		
6	Provide siting approval for Generating Facility and Interconnection Facilities to Interconnecting Transmission Owner	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of LGIP
7A	Receive Governmental Authority approval for any facilities requiring regulatory approval	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.1 of LGIA
7B	Obtain necessary real property rights and rights-of-way for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.2 of LGIA
7C	Provide to Interconnecting Transmission Owner written authorization to proceed with design, equipment procurement and construction	Interconnection Customer	As may be agreed to by the Parties	§ 5.5.2 and § 5.6.3 of LGIA
7D	Provide System Operator evidence of proceeding with design, equipment procurement, and construction	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
7E	Provide quarterly written progress reports	Interconnection Customer and	15 Calendar Days after the end of	§ 5.7 of LGIA



		Interconnecting Transmission Owner	each quarter beginning the quarter that includes the date for Milestone 7C and ending when the entire Large Generating Facility and all required Interconnection Facilities and Network Upgrades are in place	
8	Provision of Security to Interconnecting Transmission Owner pursuant to Section 11.5 of LGIA	Interconnection Customer	At least 30 Calendar Days prior to design, procurement and construction	§§ 5.5.3 and 5.6.4 of LGIA
9	Provision of Security Associated with Tax Liability to Interconnecting Transmission Owner pursuant to Section 5.17.3 of LGIA	Interconnection Customer	As may be agreed to by the Parties	§ 5.17.3 of LGIA
10A	Commit to the ordering of long lead time material for Interconnection Facilities and Network Upgrades	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of LGIP
10B	Commit to ordering of long lead time material for Interconnecting Transmission Owner's	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA

	Interconnection Facilities and Stand Alone Network Upgrades to be constructed by Interconnection Customer			
11A	Provide initial design, engineering and specification for Interconnection Customer's Interconnection Facilities to Interconnecting Transmission Owner	Interconnection Customer	180 Calendar Days prior to Initial Synchronization Date	§ 5.10.1 of LGIA § 7.5 of LGIP
11B	Provide comments on initial design, engineering and specification for Interconnection Customer's Interconnection Facilities	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of LGIA § 7.5 of LGIP
11C	Provide to Interconnecting Transmission Owner initial design, engineering and specification for Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 LGIA
11D	Provide to Interconnection Customer comments on initial design, engineering and specification for Interconnecting	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.2 of LGIA

	Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer			
12A	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities to Interconnecting Transmission Owner	Interconnection Customer	90 Calendar Days prior to Initial Synchronization Date	§ 5.10.1 of LGIA § 7.5 of LGIP
12B	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection Facilities	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of LGIA § 7.5 of LGIP
12C	Provide to Interconnecting Transmission Owner final design, engineering and specification for Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
12D	Provide to Interconnection Customer comments on final design, engineering and specification of	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.2 of LGIA

	Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer			
13A	Deliver to Interconnecting Transmission Owner "as built" drawings, information and documents regarding Interconnection Customer's Interconnection Facilities	Interconnection Customer	Within 120 Calendar Days of Commercial Operation date	§ 5.10.3 of LGIA
13B	Deliver to Interconnecting Transmission Owner "as built" drawings, information and documents regarding Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
14	Provide protective relay settings to Interconnecting Transmission Owner for coordination and verification	Interconnection Customer	At least 90 Calendar Days prior to Initial Synchronization Date	§§ 5.10.1 of LGIA
15A	Commencement of construction of Interconnection Facilities	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.6 of LGIA

15B	Commencement of construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
16	Submit updated data "as purchased"	Interconnection Customer	No later than 180 Calendar Days prior to Initial Synchronization Date	§ 24.3 of LGIA
17	In Service Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 343.1 and 4.4.5 of LGIP, § 5.1 of LGIA
18	Initial Synchronization Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.4.1, 4.4.4, 4.4.5, and 7.5 of LGIP
19	Submit supplemental and/or updated data – "as built/as-tested"	Interconnection Customer	Prior to Commercial Operation Date	§ 24.4 of LGIA
20	Commercial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.4.1, 4.4.4, 4.4.5, and 7.5 of LGIP

21A	Deliver to Interconnection Customer “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities	Interconnecting Transmission Owner	If requested, within 120 Calendar Days after Commercial Operation Date	§ 5.11 of LGIA
21B	Deliver to Interconnecting Transmission Owner “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
21C	Approve and accept for operation and maintenance the Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.2 of LGIA
22	Provide Interconnection Customer final cost invoices	Interconnecting Transmission Owner	Within 6 months of completion of construction of Interconnecting Transmission Owner	§ 12.2 of LGIA

			Interconnection Facilities and Network Upgrades	
23	Transfer control of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner to be constructed by the Interconnection Customer	Interconnection Customer	Prior to In-Service Date	§ 5.2 of LGIA
24	Transfer ownership of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner to be constructed by the Interconnection Customer	Interconnection Customer	Prior to In-Service Date	§ 5.2 of LGIA

### 3. Milestones Applicable Solely for CNR Interconnection Service and Long Lead Facility

**Treatment.** In addition to the Milestones above, the following Milestones apply to Interconnection Customers requesting CNR Interconnection Service and/or Long Lead Facility Treatment:

Item No.	Milestone Description	Responsible Party	Date	LGIP/LGIA Reference
----------	-----------------------	-------------------	------	---------------------

1	If Long Lead Facility, all dates by which Critical Path Schedule upgrades will be submitted to System Operator (end date for New Capacity Show of Interest Submission)	Interconnection Customer		§ 3.2.3 of LGIP
2	If Long Lead Facility, dates by which Long Lead Facility Deposits will be provided to System Operator (each deadline for which New Generating Capacity Resource would be required to provide financial assurance under § III.13.1.9 of the Tariff)	Interconnection Customer		§ 3.2.3 of LGIP
3	If Long Lead Facility, Capacity Commitment Period (not to exceed the Commercial Operation Date)	Interconnection Customer		§ 1 and 3.2 of LGIP
4	Submit necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date, in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of LGIP
5	Participate in a CNR Group Study	Interconnection Customer		§ 3.2.1.3 of LGIP
6	Qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of LGIP
7	Complete a re-study of the applicable Interconnection Study to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request based on the results of the Forward Capacity Auction or Reconfiguration Auction or bilateral	System Operator		§ 3.2.1.3 of LGIP



	transaction through which the Interconnection Customer received a Capacity Supply Obligation			
--	--	--	--	--

## APPENDIX C TO LGIA

### Interconnection Details

#### 1. Description of Interconnection:

Interconnection Customer shall install a [insert] MW facility, rated at [insert]MW gross and [insert] MW net, with all studies performed at or below these outputs. The Generating Facility is comprised of [insert] units in a [insert description of facility type - combined cycle, wind farm, etc.] rated at: [insert] MW each, and will located at [insert location].

The Large Generating Facility shall receive:

Network Resource Interconnection Service for the NR Capability at a level not to exceed [insert gross and net] MW for Summer, and [insert gross and net] MW for Winter.

Capacity Network Resource Interconnection Service for: (i) the NR Capability at a level not to exceed [insert gross and net at or above 50 degrees F] MW for Summer and [insert gross and net at or above 0 degrees F] MW for Winter; and (ii) the CNR Capability at [insert net] MW for Summer and [insert net] MW for Winter, which shall not exceed [insert the maximum net MW electrical output of the Generating Facility at an ambient temperature at or above 90 degrees F for summer and at or above 20 degrees F for winter.]

#### 2. Detailed Description of Generating Facility and Generator Step-Up Transformer, if applicable:

Generator Data	
Number of Generators	
Manufacturer	
Model	
Designation of Generator(s)	
Excitation System Manufacturer	
Excitation System Model	

Voltage Regulator Manufacturer	
Voltage Regulator Model	
<b>Generator Ratings</b>	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 90 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 50 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 20 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above zero Degrees F	
Station Service Load For Each Unit	
Overexcited Reactive Power at Rated MVA and Rated Power Factor	
Underexcited Reactive Power at Rated MVA and Rated Power Factor	
<b>Generator Short Circuit and Stability Data</b>	
Generator MVA rating	
Generator AC Resistance	
Subtransient Reactance (saturated)	
Subtransient Reactance (unsaturated)	
Transient Reactance (saturated)	
Negative sequence reactance	
<b>Transformer Data</b>	
Number of units	
Self Cooled Rating	
Maximum Rating	

Winding Connection (LV/LV/HV)	
Fixed Taps	
Z1 primary to secondary at self cooled rating	
Z1 primary to tertiary at self cooled rating	
Z1 secondary to tertiary at self cooled rating	
Positive Sequence X/R ratio primary to secondary	
Z0 primary to secondary at self cooled rating	
Z0 primary to tertiary at self cooled rating	
Z0 secondary to tertiary at self cooled rating	
Zero Sequence X/R ratio primary to tertiary	

**3. Other Description of Interconnection Plan and Facilities:**

*[Insert any other description relating to the Generating Facility, including, but not limited to switchyard, protection equipment, step-up transformer to the extent not described in Appendix A.]*

## **APPENDIX D TO LGIA**

### **Security Arrangements Details**

Infrastructure security of the New England Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day New England Transmission System reliability and operational security. The Commission will expect System Operator, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected to the New England Transmission System to comply with the recommendations offered by the Critical Infrastructure Protection Committee and, eventually, best practice recommendations from NERC. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

## **APPENDIX E TO LGIA**

### **Commercial Operation Date**

This Appendix E is a part of the LGIA between System Operator Interconnecting, Transmission Owner and Interconnection Customer.

[Date]

[Interconnecting Transmission Owner; Address]

[to be supplied]

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Re: \_\_\_\_\_ Large Generating Facility

Dear \_\_\_\_\_:

On [Date] [Interconnection Customer] has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that [Interconnection Customer] commenced commercial operation of Unit No. \_\_\_\_\_ at the Large Generating Facility, effective as of [Date plus one day].

Thank you.

[Signature]

[Interconnection Customer Representative]

## **APPENDIX F TO LGIA**

**Addresses for Delivery of Notices and Billings Notices:**

System Operator:

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

**Billings and Payments:**

System Operator:

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road

Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

**Alternative Forms of Delivery of Notices (telephone, facsimile or email):**

System Operator:

Facsimile: (413) 540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

With copy to:

Facsimile: (413) 535-4024

E-mail: [billingdept@iso-ne.com](mailto:billingdept@iso-ne.com)

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

DUNS Numbers:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner: [To be supplied]



## **APPENDIX G TO LGIA**

### **Interconnection Requirements For A Wind and Inverter-Based Generating Facilities**

Appendix G sets forth requirements and provisions specific to wind and inverter-based Generating Facilities. All other requirements of this LGIA continue to apply to wind and inverter-based Generating Facility interconnections.

#### **A. Technical Standards Applicable to Wind and Inverter-Based Generating Facility**

##### **i. Low Voltage Ride-Through (LVRT) Capability**

Wind and inverter-based Generating Facilities shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

##### **Transition Period LVRT Standard**

The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the System Operator and Interconnecting Transmission Owner. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e., the transformer that steps the voltage up to the transmission interconnection voltage or “GSU”), after which, if the fault remains

following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual wind generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT. Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual wind generator units that are replaced are required to meet the Appendix G LVRT Standard.

#### **Post-transition Period LVRT Standard**

All wind Generating Facilities subject to FERC Order No. 661 and not covered by the transition period described above , as well as inverter-based Generating Facilities must meet the following requirements:

1. Wind and inverter-based Generating Facilities are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind or inverter-based Generating Facility substation location, as determined by and documented by the System Operator and Interconnecting

Transmission Owner. The maximum clearing time the wind or inverter-based Generating Facility shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind or inverter-based Generating Facility may disconnect from the transmission system. Wind and inverter-based Generating Facilities shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind or inverter-based Generating Facility GSU.

2. This requirement does not apply to faults that would occur between the wind or inverter-based Generating Facility terminals and the high side of the GSU.
3. Wind and inverter-based Generating Facilities may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind and inverter-based Generating Facilities may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind or inverter-based Generating Facility or by a combination of generator performance and additional equipment.
5. Existing individual wind generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual wind generator units that are replaced are required to meet the Appendix G LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

**SECTION 1.** A newly interconnecting non-synchronous Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commences after October 5, 2016 shall maintain dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, at continuous rated power output, measured at the high-side of the station transformer or at the Point of the Interconnection if there is no station transformer. This power factor range standard shall be dynamic and

can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors (provided the use of such capacitors is solely for the purpose of offsetting collector system losses and is found to meet all of the requirements specified in the Interconnection System Impact Study), or a combination of the two.

**SECTION 2.** A wind Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commenced after April 17, 2016 but before October 5, 2016 shall maintain dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, at continuous rated power output, measured at the high-side of the station transformer or at the Point of Interconnection if there is no station transformer.

**SECTION 3.** A wind Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commenced before April 17, 2016 shall maintain a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA, if the Interconnection System Impact Study shows that such a requirement is necessary to ensure safety or reliability. For a wind Generating Facility for which the Interconnection System Impact Study commences before April 17, 2016, the power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the System Operator and Interconnecting Transmission Owner, or a combination of the two.

**SECTION 4.** A non-wind non-synchronous Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commenced before October 5, 2016 shall meet the power factor requirements of Article 9.6.1.1 of the LGIA.

**SECTION 5.** The Interconnection Customer shall not disable power factor equipment while the wind Generating Facility is in operation.

**SECTION 6.** Wind Generating Facilities shall also be able to provide sufficient additional dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Interconnection System Impact Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

Wind and inverter-based Generating Facilities shall provide SCADA capability to transmit data and receive instructions from the System Operator and Local Control Center to protect system reliability. The System Operator, Interconnecting Transmission Owner and the wind or inverter-based Generating Facility Interconnection Customer shall determine what SCADA information is essential for the proposed wind or inverter-based Generating Facility, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

## **APPENDIX 7**

### **INTERCONNECTION PROCEDURES FOR WIND GENERATION**

Appendix 7 sets forth procedures specific to a wind generating plant. All other requirements of this LGIP continue to apply to wind generating plant interconnections.

#### **A. Special Procedures Applicable to Wind Generating Plants**

The wind generating plant Interconnection Customer, in completing the Interconnection Request required by Section 3.4 of this LGIP, may provide to the System Operator a set of preliminary electrical design specifications depicting the wind generating plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind generating plant may enter the queue and receive the base case data as provided for in this LGIP.

No later than six months after submitting an Interconnection Request completed in this manner, the wind generating plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow the System Operator to complete the Interconnection System Impact Study.

**SCHEDULE 23**

**SMALL GENERATOR  
INTERCONNECTION PROCEDURES**

## **TABLE OF CONTENTS**

### **Section 1. Application**

- 1.1 Applicability
- 1.2 Pre-Application
- 1.3 Interconnection Request
- 1.4 Site Control
- 1.5 Queue Position
- 1.6 Procedures for Transition
- 1.7 Type of Interconnection Service
- 1.8 Withdrawal

### **Section 2. Fast Track Process**

- 2.1 Applicability
- 2.2 Initial Review
- 2.3 Customer Options Meeting
- 2.4 Supplemental Review

### **Section 3. Study Process**

- 3.1 Applicability
- 3.2 Scoping Meeting
- 3.3 Interconnection Feasibility Study
- 3.4 Interconnection System Impact Study
- 3.5 Interconnection Facilities Study

### **Section 4. Provisions that Apply to All Interconnection Requests**

- 4.1 Reasonable Efforts
- 4.2 Disputes
- 4.3 Interconnection Metering
- 4.4 Commissioning
- 4.5 Confidentiality
- 4.6 Comparability
- 4.7 Record Retention
- 4.8 SGIA
- 4.9 Coordination with Affected Systems
- 4.10 Evaluation of a Small Generating Facility Interconnection Request



Attachment 1 – Glossary of Terms

Attachment 2 – Small Generator Interconnection Request

Attachment 3 – Certification Codes and Standards

Attachment 4 – Certification of Small Generator Equipment Packages

Attachment 5 – 10 kW Inverter Process

Attachment 6 – Interconnection Feasibility Study Agreement

Attachment 7 – Interconnection System Impact Study Agreement

Attachment 8 – Interconnection Facilities Study Agreement

EXHIBIT 1 - Small Generator Interconnection Agreement (SGIA)

## SECTION 1. APPLICATION

### 1.1 Applicability

1.1.1 The Small Generator Interconnection Procedures (“SGIP”) and Small Generator Interconnection Agreement (“SGIA”) shall apply to Interconnection Requests, as defined in Attachment 1, pertaining to Small Generating Facilities, except that the SGIP and SGIA shall not apply to ~~:(i) a retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer’s site; (ii) a request to interconnect a new Generating Facility to a distribution facility that is subject to the Tariff if the Generating Facility will not be used to make wholesale sales of electricity in interstate commerce; or (iii) a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility’s owner intent is to sell 100% of the Qualifying Facility’s output to its interconnected electric utility. In the event the SGIP and SGIA do not apply, the Interconnection Customer shall follow the applicable state tariff, rules or procedures regarding generator interconnections.~~

~~A request to interconnect a certified Small Generating Facility (See Attachments 3 and 4 for description of certification criteria) to the Interconnecting Transmission Owner’s Distribution System that is part of the Administered Transmission System shall be evaluated under the section 2 Fast Track Process if the eligibility requirements of section 2.1 are met.~~ A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kilowatts (kW) (solely as a Network Resource) shall be evaluated under the Attachment 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility no larger than 20 megawatts (MW) that does not meet the eligibility requirements of section 2.1, or does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the section 3 Study Process.

1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of these procedures. To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for the purposes of generator interconnections under this Schedule 23. Capitalized terms in Schedule 23 that are not defined in Attachment 1 or the body of these procedures shall have the meanings specified in Section I.2.2 of the Tariff.

1.1.3 Neither these procedures nor the requirements included hereunder apply to Small Generating Facilities interconnected or approved for interconnection prior to May 9, 2006.

1.1.4 Prior to submitting its Interconnection Request (Attachment 2), the Interconnection Customer may ask the System Operator's interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The System Operator shall respond within fifteen (15) Business Days.

1.1.5 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Commission expects all ISOs/RTOs, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

1.1.6 References in these procedures to interconnection agreement are to the SGIA.

## **1.2 Pre-Application**

1.2.1 The System Operator shall designate an employee or office from which information on the application process and on an Affected System can be obtained through informal requests from the Interconnection Customer presenting a proposed project for a specific site. The names, telephone numbers, and e-mail addresses of the System Operator's contact employees or offices shall be made available on the System Operator's Internet web site. Electric system information provided to the Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the Administered Transmission System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The System Operator shall comply with reasonable requests for such information.

1.2.2 In addition to the information described in section 1.2.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form to the System Operator along with a non-refundable fee of \$500 for a pre-application report on a proposed project at a specific site. Within two (2) Business Days of receiving the pre-application report request form, the

System Operator shall provide a copy of the pre-application request form to the Interconnecting Transmission Owner. The System Operator in conjunction with the Interconnecting Transmission Owner shall provide the pre-application data described in section 1.2.3 to the Interconnection Customer within twenty (20) Business Days of receipt of the completed request form and payment of the \$500 fee. The pre-application report produced by the System Operator in conjunction with the Interconnecting Transmission Owner is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Administered Transmission System. The written pre-application report request form shall include the information in sections 1.2.2.1 through 1.2.2.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

1.2.2.1 Project contact information, including name, address, phone number, and email address.

1.2.2.2 Project location (street address with nearby cross streets and town)

1.2.2.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

1.2.2.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)

1.2.2.5 Size (alternating current kW)

1.2.2.6 Single or three phase generator configuration

1.2.2.7 Stand-alone generator (no onsite load, not including station service – Yes or No?)

1.2.2.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.

1.2.3 Using the information provided in the pre-application report request form in section 1.2.2., the System Operator in conjunction with the Interconnecting Transmission Owner will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. The selection by the System Operator in conjunction with the Interconnecting Transmission Owner does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. ~~The Interconnecting Transmission Owner shall be responsible for determining whether the proposed Point of Interconnection is on a distribution facility that is subject to the Tariff.~~ If the pre-application report request form seeks information about a Point of Interconnection that is on a distribution facility ~~that is not subject to the Tariff~~, the Interconnection Customer shall follow the applicable state tariff, rules or procedures regarding generator interconnections. Subject to section 1.2.4, the pre-application report will include the following information:

1.2.3.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

1.2.3.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.

1.2.3.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.

1.2.3.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).

1.2.3.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

1.2.3.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

1.2.3.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

1.2.3.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 2.4.4.1.1 below and absolute minimum load, when available.

1.2.3.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area. Identify whether the substation has a load tap changer.

1.2.3.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

1.2.3.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

1.2.3.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

1.2.3.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

1.2.4 The pre-application report need only include existing data. A pre-application report request does not obligate the System Operator or the Interconnecting Transmission Owner to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the System Operator in conjunction with the Interconnecting Transmission Owner cannot complete all or some of a pre-

application report due to lack of available data, the System Operator in conjunction with the Interconnecting Transmission Owner shall provide the Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on “available capacity” pursuant to section 1.2.3.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the System Operator in conjunction with the Interconnecting Transmission Owner shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

### **1.3 Interconnection Request**

#### **1.3.1 Initiating an Interconnection Request**

To initiate and establish a valid Interconnection Request, the Interconnection Customer shall submit all of the following to the System Operator in the manner specified in the Interconnection Request contained in Attachment 2 to this SGIP: (i) the processing fee or deposit specified in the Interconnection Request, (ii) a completed Interconnection Request in the form of Attachment 2, and (iii) documentation of Site Control in the form specified in Section 1.4 of this SGIP.

The Interconnection Customer must submit a separate Interconnection Request for each site. The Interconnection Customer must comply with the requirements specified in this Section 1.3.1 for each Interconnection Request even when more than one request is submitted for a single site.

#### **1.3.2 Acknowledgement of Interconnection Request**

The System Operator shall acknowledge receipt of the Interconnection Request within three (3) Business Days of receipt of the request and attach a copy of the Interconnection Request to the acknowledgement.

Within three (3) Business Days of receiving the Interconnection Request, the System Operator shall provide a copy of the Interconnection Request to the Interconnecting Transmission Owner. ~~If such request is to interconnect to a distribution facility, the Interconnecting Transmission Owner shall be responsible for determining whether the distribution facility is subject to the Tariff.~~

#### **1.3.3 Deficiencies in Interconnection Request**

An Interconnection Request will not be considered a valid request until all items in Section 1.3.1 have been received by the System Operator. If an Interconnection Request fails to meet the requirements set

forth in Section 1.3.1, the System Operator shall notify the Interconnection Customer within ten (10) Business Days of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide the System Operator the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Section 1.3.3 shall be treated in accordance with Section 1.8.

1.3.4 All fees or deposits that must be submitted to the System Operator under this SGIP, must be delivered to the System Operator's bank account by electronic transfer within the period specified in the respective provision. A deposit will not be considered received until it is in the System Operator's bank account.

#### **1.4 Site Control**

Documentation of site control must be submitted with the Interconnection Request. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. Site control may be demonstrated through:

1.4.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;

1.4.2 An option to purchase or acquire an easement, a license or a leasehold interest in the site for such purpose; or

1.4.3 An exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease, or grant the Interconnection Customer the right to possess or occupy a site for such purpose; or

1.4.4 Filed applications for required permits to site on federal or state property.

#### **1.5 Queue Position**

**1.5.1 General.** The System Operator shall assign a Queue Position based upon the date- and time-stamp of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of information on the application form in Attachment 2 to this SGIP, and Interconnection Customer provides such information in accordance with Section 1.3.3, then the System Operator shall assign Interconnection Customer a Queue Position based on the date the application form was originally submitted.

Except as otherwise provided in this Section 1.5, the Queue Position of each Interconnection Request will be used to determine: (i) the order of performing the Interconnection Studies; (ii) the order in which Interconnection Requests will be included in the CSIS and CFAC; (iii) the order in which Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service will be included in the CNR Group Study; and (iv) the cost responsibility for the Interconnection Facilities and upgrades necessary to accommodate the Interconnection Request. The System Operator shall maintain a single queue. At the System Operator's option, Interconnection Requests may be studied serially or in clusters for the purpose of the Interconnection System Impact Study.

A CSIS and CFAC shall include the Interconnection Requests that were identified as eligible to participate in the CSIS and CFAC and met the associated requirements for inclusion in said studies in accordance with Section 1.5.3 of this SGIP. An Interconnection Request included in a cluster shall consider a higher queued Interconnection Request not included in the cluster. A lower queued Interconnection Request that is not included in the cluster shall consider all of the higher queued Interconnection Requests that are part of the cluster.

**1.5.2 Order of Interconnection Requests in the CNR Group Study.** Participation in a CNR Group Study shall be a prerequisite to achieve CNR Interconnection Service and CNI Interconnection Service. The CNR Group Study (to be conducted in accordance with Section III.13.1.1.2.3 of the Tariff) shall include all Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service that have an associated New Capacity Show of Interest Form that was submitted during the New Capacity Show of Interest Submission Window for the purpose of qualification for participation in the same Forward Capacity Auction for a Capacity Commitment Period, in accordance with Section III.13.1.1.2 of the Tariff, as well as Long Lead Facilities in accordance with Section 3.2.3 of Schedule 22 of Section II of the Tariff. Where a CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a lower Queue Position is associated with a New Capacity Show of Interest Form that was submitted for qualification to participate in a particular Forward Capacity Auction for a Capacity



Commitment Period and another CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a higher Queue Position is not associated with a New Capacity Show of Interest Form that was submitted for qualification until a subsequent Forward Capacity Auction, the CNR Interconnection Service or CNI Interconnection Service Interconnection Request with the lower Queue Position will be included in the CNR Group Study prior to the CNR Interconnection Service or the CNI Interconnection Service Interconnection Request with the higher Queue Position.

However, where an Interconnection Customer with a CNR Interconnection Service Interconnection Request submits a New Capacity Show of Interest Form for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and identifies in that New Capacity Show of Interest Form one or more Elective Transmission Upgrade Interconnection Request(s) for an Internal ETU that is not already included in the network model pursuant to Section III.12 of the Tariff for the particular Forward Capacity Auction, the CNR Interconnection Request will be included in the CNR Group Study at the lowest of the CNR Interconnection Request's or its associated Elective Transmission Upgrade Interconnection Request(s) for the Internal ETU's Queue Position. Where multiple Interconnection Customers' CNR Interconnection Service Interconnection Requests are associated with the same lower Queue Position for an Elective Transmission Upgrade Interconnection Request for an Internal ETU in the CNR Group Study, the CNR Interconnection Request's Queue Position will be used as the tie breaker to dictate the relative order in which the CNR Interconnection Service Interconnection Request will be included in the CNR Group Study.

An Interconnection Customer with a Generating Facility or that is associated with an Import Capacity Resource in the case of an Elective Transmission Upgrade that is treated as a Conditional Qualified New Resource, in accordance with Section III.13.1.1.2.3(f) of the Tariff, may be responsible for the facilities and upgrades associated with an overlapping CNR Interconnection Service or CNI Interconnection Service Interconnection Request having a higher Queue Position if the Conditional Qualified New Resource obtains a Capacity Supply Obligation through a Forward Capacity Auction under Section III.13.2.5 of the Tariff.

An Interconnection Customer with a lower queued CNR Interconnection Service Interconnection Request for a Generating Facility or CNI Interconnection Service Interconnection Request for an Elective Transmission Upgrade that has achieved Commercial Operation and obtained CNR Interconnection Service or CNI Interconnection Service, respectively, may be responsible for additional facilities and upgrades if the related higher queued CNR Interconnection Service or CNI Interconnection Service

Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively. In such circumstance, Attachment 2 to the SGIA for the lower queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request shall specify the facilities and upgrades for which the Interconnection Customer shall be responsible if the higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively.

Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates). Interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates that have not yet received the System Operator's approval for their Proposed Plan Applications under Section I.3.9 of the Tariff at the commencement of the CNR Group Study shall be included in the CNR Group Study after all Interconnection Requests submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and all interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff have been included in the CNR Group Study in order of submission to the Interconnecting Transmission Owners or their distribution company affiliates.

### **1.5.3 Clustering.**

Clustering Interconnection Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable Regional System Plan in light of the New England Transmission System's capabilities for the time period under study. The System Operator may study an Interconnection Request serially to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Small Generating Facility.

#### **1.5.3.1 Triggers for Studying Interconnection Requests in Clusters.**

At the discretion of the System Operator, Interconnection Requests will be studied in clusters for the purpose of the Interconnection System Impact Study and the Interconnection Facilities Study when the combination of the following circumstances is present in the interconnection queue: (a) there are two (2) or more Interconnection Requests without completed Interconnection System Impact Studies in the same electrical part of the New England Control Area based on the requested Point of Interconnection, and (b) the System Operator has determined that none of the Interconnection Requests identified in (a) of this Section 1.5.3.1 will be able to interconnect, either individually or on a cluster basis, without the use of common significant new transmission line infrastructure rated at 115 kV AC or HVDC.

#### **1.5.3.2 Notice of Initiation of Cluster Studies.**

When the combination of the triggers specified in Section 1.5.3.1 of this SGIP are present in the interconnection queue, the System Operator will provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff. The System Operator also will provide notice to the Interconnection Customers with Interconnection Requests identified in Section 1.5.3.1 of this SGIP, and at the time the System Operator notifies the Planning Advisory Committee of the initiation of a cluster, all study work for these Interconnection Requests will be suspended, and they will proceed under Section 1.5.3 of this SGIP. The System Operator will conduct Clustering in two phases. In the first phase, the System Operator will perform a CRPS to identify the CETU and associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests considered in Section 1.5.3.1 of this SGIP, consistent with Section 15.2 of Attachment K. In the second phase, the System Operator will conduct a CSIS and a CFAC to study the Interconnection Requests identified through the CRPS that have elected to participate in the CSIS together with the identified CETU and associated system upgrades, in accordance with this SGIP.

Within sixty (60) Calendar Days of the System Operator's notice to the Planning Advisory Committee of the initiation of the use of Clustering for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff, Interconnection Customers with Interconnection Requests identified in Section 1.5.3.1 shall submit the technical data called for in Attachment 2 (including Attachment A, if applicable) to this SGIP to support the conduct of the CRPS.

#### **1.5.3.3 Cluster Interconnection System Impact Study.**

##### **1.5.3.3.1 Notice of Cluster Interconnection System Impact Study Entry Deadline.**

At the same time the System Operator issues the final CRPS report to the Planning Advisory Committee in accordance with Section 15.4 of Attachment K, the System Operator will provide notice of the entry deadline for the CSIS (the “Cluster Entry Deadline”) to the Interconnection Customers with Interconnection Requests identified in the final CRPS report as eligible to participate in the CSIS. The Cluster Entry Deadline shall be thirty (30) Calendar Days from the posting of the final CRPS report.

#### **1.5.3.3.2 Cluster Interconnection System Impact Study Entry Requirements.**

All Interconnection Requests identified in the final CRPS report, by Queue Position as assigned in accordance with Section 1.5.1 of this SGIP, shall be eligible to be studied together in the CSIS.

**1.5.3.3.2.1 Cluster Entry Deadline Election.** By the Cluster Entry Deadline, an Interconnection Customer with an Interconnection Request identified as eligible to be studied in the CSIS must, in writing:

1. withdraw the Interconnection Request, pursuant to Section 1.8;
2. request that the System Operator re-assign the Interconnection Customer’s Interconnection Request a new Queue Position at the bottom of the queue as of the Cluster Entry Deadline in relative order with any other Interconnection Requests requesting to be re-queued under this Section 1.5.3.3.2.1; or
3. request to be included in the CSIS and meet the CSIS entry requirements specified in Section 1.5.3.3.2.2.

If, by the Cluster Entry Deadline, Interconnection Customer fails to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or request to be included in the CSIS and meet the CSIS entry requirements, then the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If Interconnection Customer elects option (iii) and does not meet all of the CSIS entry requirements specified in Section 1.5.3.3.2.2 by the Cluster Entry Deadline, the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If an initial Cluster Participation Deposit had been submitted as part of the incomplete CSIS entry requirements submission, the initial Cluster Participation Deposit will be refunded at the time the Interconnection Request is withdrawn.

#### **1.5.3.3.2.2. CSIS Entry Requirements.**

An Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS that elects option (iii) under Section 1.5.3.3.2.1 must meet the following CSIS entry requirements in order to be included in the CSIS:

**(1) Cluster System Impact Study Application.** By the Cluster Entry Deadline, Interconnection Customer must submit to the System Operator, a completed Cluster System Impact Study Application in the form specified in Attachment 2, Attachment A-1 to this SGIP requesting the inclusion of the Interconnection Request in the CSIS;

**(2) System Impact Study Agreement, Study Deposit, Technical Data, and Site Control.** If an Interconnection Feasibility Study Agreement or an Interconnection System Impact Study Agreement has been executed prior to the issuance of the final CRPS report identifying the Interconnection Request as eligible for inclusion in a CSIS, such agreement shall terminate upon execution of a new Interconnection System Impact Study Agreement in accordance with this Section 1.5.3.3.2.2, and any unused balance of the study deposit associated with the terminated agreement shall be applied toward the study deposit associated with the new Interconnection System Impact Study Agreement.

Within fifteen (15) Business Days following the Cluster Entry Deadline, the System Operator and Interconnecting Transmission Owner will provide to Interconnection Customer an Interconnection System Impact Study Agreement, including a non-binding good faith estimate of the costs and timeframe for commencing and completing the CSIS.

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after receipt along with continued demonstration of Site Control, the technical data called for in Attachment 2 (including Attachment A, if applicable), and a refundable study deposit, to the extent that any additional study deposit is required, in accordance with Section 3.4.2 of this SGIP.

**(3) Cluster Participation Deposit.** By the Cluster Entry Deadline, Interconnection Customer must also submit to the System Operator an initial Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CRPS report. If the System Operator subsequently identifies that an Internal ETU has met the requirements to take the place of a

CETU, or portion thereof, pursuant to Section 1.5.3.3.3.4 of this SGIP, the initial Cluster Participation Deposit will be reduced to exclude the costs associated with the CETU, or portion thereof, that is being replaced by the Internal ETU, and the Interconnection Customer shall be refunded the corresponding amount. Cost allocation of the CETU and associated upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The initial Cluster Participation Deposit will be fully refunded (with interest to be calculated in accordance with Section 1.8 of this SGIP) to Interconnection Customer with an Interconnection Request that met the cluster entry requirements: (i) if the cluster is initially undersubscribed by more than ten (10) percent of the quantity of megawatts that the CETU developed through the CRPS was designed to enable and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 1.8, before the CSIS starts, (ii) if the CSIS is initially oversubscribed as described in Section 1.5.3.3.3.2 of this SGIP (e.g., the CETU developed through the CRPS is designed to enable 1,000 MW and more than 1,000 MW meet the CSIS entry requirements by the Cluster Entry Deadline), in which case the Cluster Participation Deposits will be refunded to Interconnection Customers with Interconnection Requests corresponding to the oversubscribed megawatt quantities, (iii) if the cost estimates for the CETU and the associated system upgrades provided in the final CRPS report for the entire cluster have increased by twenty-five (25) percent or more when compared to the cost estimates provided in the draft CSIS report or the draft CFAC report and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 1.8, within thirty (30) Calendar Days after receipt of the draft CSIS report or the draft CFAC report in accordance with Section 3.4.5 and Section 3.5.4 of this SGIP, respectively, (iv) if less than two (2) Interconnection Requests included in the CSIS remain in the interconnection queue during the CSIS or CFAC, as applicable, in which case, the CSIS or the CFAC terminates and the remaining Interconnection Request proceeds in serial queue order, (v) at the time the Interconnection Customer with an Interconnection Request included in the CSIS provides to the Interconnecting Transmission Owner the deposit specified in Section 4.8 of this SGIP, (vi) if no Interconnection Customer with an Interconnection Request included in the cluster executes an Interconnection Agreement and provides to the Interconnecting Transmission Owner the deposit specified in Section 4.8 of this SGIP, or (vii) if all Interconnection Requests included in the cluster withdraw from the interconnection queue.

Otherwise, the initial Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue at any time after the Cluster Entry Deadline. The non-refundable initial Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in

Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **1.5.3.3.3 Cluster Filling, Oversubscription and Backfilling Upon Withdrawal.**

**1.5.3.3.3.1 Cluster Filling.** The CSIS shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area relative to the CETU identified in the final CRPS report that do not yet have a completed Interconnection System Impact Study and met the CSIS entry requirements by the Cluster Entry Deadline up to the approximate megawatt quantity identified in the CRPS as potentially enabled by the CETU. The Interconnection Requests will be included in the CSIS in queue order, based on the Queue Positions assigned in accordance with Section 1.5.1 of this SGIP, relative to other eligible Interconnection Requests.

**1.5.3.3.3.2 Cluster Oversubscription.** If an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to participate in a CSIS met the CSIS entry requirements and therefore would have been eligible for inclusion in the CSIS but is excluded as a result of the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report having been exhausted in queue order under Section 1.5.3.3.3.1, (i) the Cluster Participation Deposit for the CSIS will be refunded to the Interconnection Customer, and (ii) the Interconnection Request will maintain its Queue Position. If there are two (2) or more Interconnection Requests after the CSIS is filled, the System Operator will initiate another cluster to identify the transmission infrastructure to enable the interconnection of another round of Interconnection Requests consistent with Section 15.1 of Attachment K.

**1.5.3.3.3.3 Cluster Backfilling Upon Withdrawal.** Upon withdrawal of an Interconnection Request that is included in the CSIS, the System Operator will backfill the CSIS, in queue order, with later-queued Interconnection Requests consistent with the methodology used to fill the original CSIS as specified in Section 1.5.3.3.3.1 of this SGIP. The System Operator will notify all Interconnection Customers with Interconnection Requests identified by the System Operator as eligible for backfilling that the respective Small Generating Facility (or part thereof) proposed in the Interconnection Request is eligible to participate in the CSIS, and the Interconnection Customer shall have thirty (30) Calendar Days from receipt of System Operator's notice to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or accept the inclusion of the Interconnection Request (or part thereof, in which case the Interconnection Customer shall modify the Interconnection Request to reflect the appropriate reduction) in the CSIS and meet the CSIS entry requirements, consistent with Section

1.5.3.3.2 of this SGIP. If the Interconnection Customer does not make one of these three elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure and consider other later-queued Interconnection Requests.

**1.5.3.3.4 Scope of Cluster Interconnection System Impact Study.** Except as otherwise provided in this Section 1.5.3.3.4, the CSIS shall be conducted in accordance with Sections 3.4.3 and 3.4.4 of this SGIP. The Study Case developed for the CSIS shall also include the CETU and associated system upgrades identified in the final CRPS report. An Internal ETU can be considered, and included in the CSIS, in place of a CETU, or portion thereof, if all of the Interconnection Customers with Interconnection Requests included in the cluster that the ISO has determined need to use the Internal ETU have indicated in the Cluster Application Form or with the executed Interconnection System Impact Study Agreement that they have a contractual commitment in place providing for the Interconnection Customers to fund and the right to use the Internal ETU. The CSIS shall evaluate the proposed interconnections to the New England Transmission System under the NC Interconnection Standard consistent with Section 1.7.2 of this SGIP and as detailed in the ISO New England Planning Procedures. Consistent with the NC Interconnection Standard, the evaluation will include conditions where the projects proposed in the Interconnection Requests that are included in the CSIS are not dispatched against each other if they do not share a system constraint that would provide the basis for a redispatch condition. The CSIS shall consist of the analysis specified in Section 3.4.3 of this SGIP except for analysis associated with an Interconnection Feasibility Study or a preliminary, non-binding, analysis. An Interconnection Customer with an Interconnection Request being studied as part of the CSIS cannot elect to have the Interconnection Feasibility Study or a preliminary, non-binding, analysis performed as part of the CSIS.

**1.5.3.3.5. Restudy of Cluster Interconnection System Impact Study.** In addition to the circumstances specified in Section 3.4.6 of this SGIP, a re-study of the CSIS is required due to the withdrawal of an Interconnection Request that had been included in the CSIS. Upon withdrawal of an Interconnection Request that had been included in the CSIS, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 1.5.3.3.3.3. A re-study will be conducted to determine if there are any changes in the upgrades identified during the CSIS with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

**1.5.3.4. Cluster Interconnection Facilities Study.**



Notwithstanding any other provision in this SGIP, an Interconnection Customer with an Interconnection Request included in a completed CSIS will not be eligible to waive the, or request a separate, CFAC. All Interconnection Customers with an Interconnection Request included in a completed CSIS shall be studied together in the CFAC for the purpose of implementing the conclusions of the CSIS with respect to non-sole use facilities.

**1.5.3.4.1 Cluster Interconnection Facilities Study Entry Requirements.**

An Interconnection Customer with an Interconnection Request that was included in a completed CSIS shall execute an Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator, together with the required technical data and refundable deposit for the Interconnection Facilities Study as specified in Section 3.5.1 of this SGIP.

**1.5.3.4.2. Scope of Interconnection Facilities Study.** The CFAC will be conducted in accordance with Sections 3.5.2 and 3.5.3 of this SGIP based on a +/- 20 percent good faith cost estimate.

**1.5.3.4.3 Re-study of the Interconnection Facilities Study.** In addition to the circumstances specified in Section 3.5.5 of this SGIP, a re-study of the CFAC is required due to the withdrawal of an Interconnection Request that had been included in the CFAC. Upon withdrawal of an Interconnection Request included in the CFAC, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 1.5.3.3.3. A re-study of the CSIS and CFAC will be conducted to determine if there are any changes in the upgrades identified during the CSIS and CFAC with the exception of the CETU identified in the final CRPS report, which shall remain consistent with the megawatt quantity(ies) considered in the final CRPS report.

**1.5.3.4.4 Additional Cluster Participation Deposit.** Within thirty (30) Calendar Days after receipt of the final CFAC report in accordance with Section 3.5.3 of this SGIP, an Interconnection Customer with an Interconnection Request included in the CFAC shall submit to the System Operator an additional Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CFAC report. Cost allocation of the CETU and associated upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The additional Cluster Participation Deposit provided under this Section 1.5.3.4.4 will be fully refunded (with interest to be calculated in accordance with Section 1.8 of this SGIP) to Interconnection Customer

that submitted the additional Cluster Participation Deposit if the conditions specified in Sections 1.5.3.3.2.2(3)(v), (vi), or (vii) above occur.

Otherwise, the additional Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue. The non-refundable additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

**1.5.4 Transferability of Queue Position.** An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change. The Interconnection Customer must notify the System Operator, in writing, of any transfers of Queue Position and must provide the System Operator with the transferee's contact information, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

**1.5.5 Modifications.** Any modification to the Interconnection Request, including the information provided in the attachments, and to the machine data or equipment configuration or to the interconnection site of the Small Generating Facility not agreed to in writing by the System Operator, in consultation with the Interconnecting Transmission Owner, and the Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the change are undertaken. An Interconnection Customer may decrease the electrical output of a proposed Small Generating Facility after the Cluster Entry Deadline specified in Section 1.5.3.3.1 of this SGIP; however, the requesting Interconnection Customer remains responsible for costs corresponding to the megawatt quantity requested as of the Cluster Entry Deadline. A request to: (1) increase the energy capability or capacity capability output of or add energy storage capability to the Small Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to 1.6.4 of this SGIP shall require a new Interconnection Request for the incremental increase and such Interconnection Request will receive the lowest Queue Position available at that time for the purposes of cost allocation and study analysis; and (2) change from NR Interconnection Service to CNR Interconnection Service, at any time, shall require a new Interconnection Request for CNR

Interconnection Service and such Interconnection Request will receive the lowest Queue Position available at that time for the purposes of cost allocation and study analysis.

Notwithstanding the foregoing, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service has until the Forward Capacity Auction for which the associated Capacity Commitment Period begins less than seven (7) years from the date of the original Interconnection Request for CNR Interconnection Service to clear the entire megawatt amount for which the CNR Interconnection Service was requested (or as that amount has been modified in accordance with this Section 1.5.5). A new Interconnection Request for CNR Interconnection Service will be required for the Generating Facility to participate in any subsequent auctions.

## **1.6 Procedures for Transition**

**1.6.1 Queue Position for Pending Requests.** Any Interconnection Customer assigned a Queue Position prior to November 1, 2017 shall retain that Queue Position subject to Section 1.6 of the SGIP.

1.6.1.1 If an Interconnection Study Agreement has not been executed prior to November 1, 2017, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with the version of this SGIP in effect on November 1, 2017 (or as revised thereafter).

1.6.1.2 If an Interconnection Study Agreement has been executed prior to November 1, 2017, such Interconnection Study shall be completed in accordance with the terms of such agreement.

If an Interconnection Study Agreement has been executed prior to November 1, 2017, but the Interconnection Study has not commenced, such Interconnection Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the SGIP in effect on November 1, 2017. Interconnection Studies for Interconnection Requests seeking to interconnect into the Northern and Western Maine parts of the New England Control Area that do not have a completed Interconnection System Impact Study by November 1, 2017 shall be included in the Maine Resource Integration Study, which shall be the first CRPS. The Interconnection Customers identified in the Maine Resource Integration Study as eligible to participate in the associated Cluster System Impact Study shall make one of the elections and complete the associated requirements specified in Section 1.5.3.3.2 of this SGIP within thirty (30) Calendar Days from the later of November 1, 2017 or the final Maine Resource Integration Study report. If the Interconnection Customer does not make one of the elections and complete the associated requirements by the thirtieth Calendar Day, the System

Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure.

**1.6.2 Transition Period.** To the extent necessary, the System Operator, Interconnection Customers with an outstanding Interconnection Request (i.e., an Interconnection Request for which an SGIA has neither been executed nor submitted to the Commission for approval prior to November 1, 2017), Interconnecting Transmission Owner and any other Affected Parties, shall transition to proceeding under the version of the SGIP in effect as of November 1, 2017 (or as revised thereafter) within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term “outstanding Interconnection Request” herein shall mean any Interconnection Request, on November 1, 2017: (i) that has been submitted, together with the required deposit and attachments, but not yet accepted by the System Operator; (ii) where the related SGIA has not yet been submitted to the Commission for approval in executed or unexecuted form, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding Interconnection Request as of the effective date of this SGIP may request a reasonable extension of the next applicable deadline if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension, not to exceed sixty (60) Calendar Days, shall be granted by the System Operator to the extent consistent with the intent and process provided for under this SGIP.

**Interconnection Requests for Distribution Facilities Submitted Prior to August 28, 2022**

Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that submitted the Interconnection Request to the System Operator prior to August 28, 2022; and (iii) that have not completed the applicable interconnection process under a state tariff, rules or procedures shall complete the System Operator’s interconnection process in Schedule 23 of Section II of the Tariff. Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that had already completed the applicable interconnection process under a state tariff, rules or procedures; and (iii) that subsequently submitted an Interconnection Request to the System Operator prior to August 28, 2022 may either complete the System Operator’s interconnection process in Schedule 23 of Section II of the Tariff or withdraw the Interconnection Request submitted to the System Operator.

**1.6.3 One-Time Election for CNR Interconnection Service at Queue Position Assigned Prior to February 1, 2009.** An Interconnection Customer with an outstanding Interconnection Request will be

eligible to make a one-time election to be considered for CNR Interconnection Service at the Queue Position assigned prior to February 1, 2009. The Interconnection Customer's one-time election must be made by the end of the New Generating Capacity Show of Interest Submission Window for the fourth Forward Capacity Auction. Interconnection Customers requesting CNR Interconnection Service will be required to comply with the requirements for CNR Interconnection Service set forth in Section 1.7.1. Interconnection Customers requesting CNR Interconnection Service that have not received a completed Interconnection System Impact Study may request a preliminary, non-binding, analysis of potential upgrades that may be necessary for the fourth Forward Capacity Auction – the prompt or near-term auction – pursuant to Sections 3.3.2 or 3.4.3, whichever is applicable.

#### **1.6.4 Grandfathering.**

1.6.4.1 An Interconnection Customer's Generating Facility that is interconnected pursuant to an Interconnection Agreement executed or submitted to the Commission for approval prior to February 1, 2009, will maintain its status as a Network Resource with Network Resource Interconnection Service eligible to participate in the New England Markets, in accordance with the requirements of Market Rule 1, Section III of the Tariff, up to the megawatt amount specified in the Interconnection Agreement, subject to the Interconnection Customer satisfying all requirements set forth in the Interconnection Agreement and this SGIP. If the Generating Facility does not meet the criteria set forth in Section 1.6.4.3 of this SGIP, the Interconnection Customer will be eligible to make a one-time election, pursuant to Section 1.6.3, for Capacity Network Resource treatment without submitting a new Interconnection Request; however, the Interconnection Customer will be required to comply with the requirements for CNR Interconnection Service set forth in Section 1.7.1. Upon completion of the requirements to obtain CNR Interconnection Service, the Interconnection Customer's Interconnection Agreement shall be amended to conform to the SGIA in Exhibit 1 of this SGIP.

1.6.4.2 An Interconnection Customer's Generating Facility governed by an Interconnection Agreement either executed or filed with the Commission in unexecuted form prior to August 1, 2008, shall maintain the Queue Position assigned as of August 1, 2008, and be eligible to participate in the New England Markets, in accordance with the requirements in Market Rule 1, Section III of the Tariff, as in effect as of August 1, 2008, so long as the Interconnection Customer complies with all of the requirements specified in the Interconnection Agreement, including achieving the milestones associated with At-Risk Expenditures, subject to Section 1.5.5 of this SGIP.

1.6.4.3 All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a CNR and obtain CNR Interconnection Service, in accordance with this SGIP, up to the CNR Capability of the resource. The grandfathered CNR Capability for these resources shall be equal to the megawatt amount established pursuant to the following hierarchy:

- (a) First, the megawatt amount specified in an Interconnection Agreement (whether executed or filed in unexecuted form with the Commission).
- (b) Second, in the absence of an Interconnection Agreement with a specified megawatt amount, the megawatt amount specified in an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision).
- (c) Third, in the absence of an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) with a specified megawatt amount, as determined by the System Operator based on the documented historic capability of the Generating Facility.

Where a resource has both an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision), the lower megawatt amount will govern until the resource completes the applicable process(es) under the Tariff for obtaining the higher megawatt amount. The absence of an Interconnection Agreement or an approval pursuant to Section I.3.9 (or its predecessor provision) specifying a megawatt amount shall be confirmed by an affidavit executed by a corporate officer of the resource attesting that the resource does not have an Interconnection Agreement and/or an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) that specifies a megawatt amount.

Where the governing document (as determined by the hierarchy set forth in 1.6.4.3) specifies a megawatt amount at an ambient temperature consistent with the definition of CNR Capability, the grandfathered CNR Capability shall be equal to that amount.

Where the governing document (as determined by the hierarchy set forth in Section 1.6.4.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of CNR Capability.

Where the implementation of this Section 1.6.4.3 results in a CNR Capability that is different than previously had been identified, the revised CNR Capability will be applied commencing with the next Forward Capacity Auction qualification process (after the revised CNR Capability value is identified),

which is initiated by the Show of Interest Window in accordance with Section III.13 of the Tariff. The revised CNR Capability will continue to govern until the resource completes the applicable process(es) for obtaining the higher megawatt amount.

1.6.4.4 All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a NR and obtain NR Interconnection Services in accordance with this SGIP, up to the NR Capability of the resource. The grandfathered NR Capability shall be determined pursuant to the hierarchy set forth in Section 1.6.4.3.

Where the governing document (as described by the hierarchy set forth in Section 1.6.4.3) of a resource for which a temperature-adjustment curve is used for the claimed capability verification, as set forth in the ISO New England Manuals, specifies a megawatt amount at an ambient temperature, the grandfathered NR Capability shall be equal to a temperature-adjusted value consistent with the definition of NR Capability.

Where the governing document (as determined by the hierarchy set forth in Section 1.6.4.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of NR Capability.

## **1.7 Type of Interconnection Services**

At the time the Interconnection Request is submitted, the Interconnection Customer must request either CNR Interconnection Service or NR Interconnection Service, as described in Sections 1.7.1 and 1.7.2 below. An Interconnection Customer that meets the requirements to obtain CNR Interconnection Service shall obtain NR Interconnection Service up to the NR Capability upon completion of all requirements for NR Interconnection Service, including all necessary upgrades. Upon completion of all requirements for the CNR Interconnection Service, the Interconnection Customer shall also receive CNR Interconnection Service for CNR Capability. An Interconnection Customer that meets the requirements to obtain NR Interconnection Service shall receive NR Interconnection Service for the Interconnection Customer's Generating Facility NR Capability.

### **1.7.1 Capacity Network Resource Interconnection Service**

1.7.1.1 **The Product.** The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance

with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which CNRs are interconnected under the CC Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Small Generating Facility to be designated as a CNR, and to participate in the New England Markets, in accordance with the Tariff, up to the CNR Capability or as otherwise provided in the Tariff, on the same basis as existing CNRs, and to be studied as a CNR on the assumption that such a designation will occur.

**1.7.1.2 The Studies.** All Interconnection Studies for CNR Interconnection Service shall assure that the Interconnection Customer's Small Generating Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System. The CNR Group Study for CNR Interconnection Service shall assure that the Interconnection Customer's Small Generating Facility can be interconnected in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other CNRs and Elective Transmission Upgrades with CNI Interconnection Service, in accordance with the CC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The Interconnection Request may also be studied with the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

**1.7.1.3 Milestones for CNR Interconnection Service.** In addition to the requirements set forth in this SGIP, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service shall complete the following milestones prior to receiving CNR Interconnection Service for the CNR Capability, such milestones to be specified in Attachment 4 of the SGIA as either completed or to be completed: (i) submit the necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date (except as modified by Agreement with the System Operator pursuant to Section 1.5.5 of this SGIP), in accordance with the provisions of Section III.13 of the Tariff; (ii) participate in a CNR Group Study for the Forward Capacity Auction associated with the requested Generating Facility's Commercial Operation Date; (iii) qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff; and (iv) complete a re-study of the applicable Interconnection Study and CNR Group Study after the Forward Capacity Auction, Reconfiguration Auction, or bilateral transaction through which the Interconnection Customer received a



Capacity Supply Obligation to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request. The re-study shall include those CNR Interconnection Service or CNI Interconnection Service Interconnection Requests with a higher Queue Position that cleared and shall exclude any upgrades that are no longer necessary as a result of existing capacity that will be retired as of the start of the Capacity Commitment Period for which the resource has received a Capacity Supply Obligation. With respect to (iv) above, if an Interconnection Study Agreement has been executed, the Interconnection Study associated with the Interconnection Study Agreement shall include the necessary analysis that would otherwise have been performed in a re-study. If the original Interconnection Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Study Agreement. If an SGIA has been either executed or filed with the Commission in unexecuted form, then the last Interconnection Study completed for the Interconnection Customer under this SGIP shall be subject to re-study. The Attachments to the SGIA shall be amended (pursuant to Article 12.2 of the SGIA) to reflect CNR Capability and the results of the re-study.

## **1.7.2 Network Resource Interconnection Service**

**1.7.2.1 The Product.** The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which Network Resources are interconnected under the NC Interconnection Standard. NR Interconnection Service allows the Interconnection Customer's Small Generating Facility to participate in the New England Markets in accordance with the provisions of Market Rule 1, Section III of the Tariff, up to the gross and net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as other Network Resources. Notwithstanding the above, the portion of a Small Generating Facility that has been designated solely as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNR Interconnection Service.

**1.7.2.2 The Studies.** The Interconnection Studies for an Network Resource shall assure that the Interconnection Customer's Small Generating Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer

capability for interfaces affected by the unit, in accordance with the NR Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions.

However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnecting Transmission Owner why the study of non-peak load conditions is required for reliability purposes.

1.7.2.3 Milestones for NR Interconnection Service. An Interconnection Customer with an Interconnection Request for NR Interconnection Service shall complete the requirements in this SGIP prior to receiving NR Interconnection Service.

## **1.8 Withdrawal**

1.8.1 The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to System Operator, which System Operator will transmit to the Interconnecting Transmission Owner and any Affected Parties. In addition, if the Interconnection Customer fails to adhere to all requirements of this SGIP, except as provided in Section 4.2 (Disputes), the System Operator shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Except as otherwise provided elsewhere in this SGIP, upon receipt of such written notice, the Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the deficiency or to notify the System Operator of its intent to pursue dispute resolution, and the System Operator shall notify the Interconnecting Transmission Owner and any Affected Parties of the same.

1.8.2 Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during dispute resolution, the System Operator may eliminate the Interconnection Customer's Interconnection Request from the queue until such time that the outcome of dispute resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to System Operator, Interconnecting Transmission Owner, and any Affected Parties all costs prudently incurred with respect to that Interconnection Request prior to the System Operator's receipt of

notice described above. The Interconnection Customer must pay all monies due before it is allowed to obtain any interconnection study data or results.

1.8.3 The System Operator shall update the OASIS Queue Position posting. The System Operator and Interconnecting Transmission Owner shall: (i) arrange to refund to the Interconnection Customer any portion of the Interconnection Customer's deposit or study payments that exceeds the costs incurred; or (ii) arrange to charge to the Interconnection Customer any amount of such costs incurred that exceed the Interconnection Customer's deposit or study payments. In the event of such withdrawal, the System Operator, subject to the confidentiality provisions of Section 4.5 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information, shall provide, at Interconnection Customer's request, all information developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## **SECTION 2. FAST TRACK PROCESS**

### **2.1 Applicability**

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with the Distribution System that is part of the Administered Transmission System if the Small Generating Facility's capacity does not exceed the size limits identified in the table below. Small Generating Facilities below these limits are eligible for Fast Track review. However, Fast Track eligibility is distinct from the Fast Track Process itself, and eligibility does not imply or indicate that a Small Generating Facility will pass the Fast Track screens in section 2.2.1 below or the Supplemental Review screens in section 2.4.4 below.

Fast Track eligibility is determined based upon the generator type, the size of the generator, voltage of the line and the location of and the type of line at the Point of Interconnection. All Small Generating Facilities connecting to lines greater than or equal to 69 kilovolt (kV) are ineligible for the Fast Track Process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for the Fast Track Process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Small Generating Facilities located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for the Fast Track Process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's

proposed Small Generating Facility must meet the codes, standards, and certification requirements of Attachments 3 and 4 of these procedures, or the System Operator in conjunction with the Interconnecting Transmission Owner has to have reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

Fast Track Eligibility for Inverter-Based Systems		
Line Voltage	Fast Track Eligibility Regardless of Location	Fast Track Eligibility on a Mainline <sup>1</sup> and $\leq 2.5$ Electrical Circuit Miles from Substation <sup>2</sup>
$< 5$ kV	$\leq 500$ kW	$\leq 500$ kW
$\geq 5$ kV and $< 15$ kV	$\leq 2$ MW	$\leq 3$ MW
$\geq 15$ kV and $< 30$ kV	$\leq 3$ MW	$\leq 4$ MW
$\geq 30$ kV and $< 69$ kV	$\leq 4$ MW	$\leq 5$ MW

1. For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

2. An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.2.

## 2.2 Initial Review

Within fifteen (15) Business Days after the System Operator notifies the Interconnection Customer it has received a complete Interconnection Request, the System Operator in conjunction with the Interconnecting Transmission Owner shall perform an initial review using the screens set forth below, shall notify the Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the determinations under the screens.

### 2.2.1 Screens

2.2.1.1 The proposed Small Generating Facility's Point of Interconnection must be on a portion of the Interconnecting Transmission Owner's Distribution System that is subject to the Tariff.

2.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed 15 % of the line section annual peak load as most recently measured at the substation. A line section is

that portion of an Interconnecting Transmission Owner's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

2.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 % of a spot network's maximum load or 50 kW.

2.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 % to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

2.2.1.5 The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 % of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.

2.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Interconnecting Transmission Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.

2.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 % of the nameplate rating of the service transformer.

2.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the point of interconnection).

2.2.1.10 No construction of facilities by the Interconnecting Transmission Owner on its own system shall be required to accommodate the Small Generating Facility.

2.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved for Network Resource interconnection Service and the System Operator in conjunction with the Interconnecting Transmission Owner will provide the Interconnection Customer an executable SGIA within five (5) Business Days after the determination.

2.2.3 If the proposed interconnection fails the screens, but the System Operator in conjunction with the Interconnecting Transmission Owner determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the System Operator in conjunction with the Interconnecting Transmission Owner shall provide the Interconnection Customer an executable SGIA within five (5) Business Days after the determination. If the Interconnection Request is for Capacity Network Resource Interconnection Service, the Interconnection Customer must also comply with the milestones for CNR Interconnection Service specified in Section 1.7.1.3 of the SGIP.

2.2.4 If the proposed interconnection fails the screens, but the System Operator in conjunction with the Interconnecting Transmission Owner, does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or

further study, the System Operator in conjunction with the Interconnecting Transmission Owner shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

### **2.3 Customer Options Meeting**

If the System Operator in conjunction with the Interconnecting Transmission Owner determines the Interconnection Request cannot be approved without (1) minor modifications at minimal cost, (2) a supplemental study or other additional studies or actions, or (3) incurring significant cost to address safety, reliability, or power quality problems, the System Operator shall notify the Interconnection Customer of that determination within five (5) Business Days after the determination and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of such determination, the System Operator shall offer to convene a customer options meeting with the Interconnection Customer and Interconnecting Transmission Owner to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the determination, or at the customer options meeting:

2.3.1 The Interconnecting Transmission Owner shall offer to perform facility modifications or minor modifications to the Interconnecting Transmission Owner's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Interconnecting Transmission Owner's electric system. If the Interconnection Customer agrees to pay for the modifications to the Interconnecting Transmission Owner's electric system, the System Operator in conjunction with the Interconnecting Transmission Owner will provide the Interconnection Customer with an executable SGIA within ten (10) Business Days of the customer options meeting; or

2.3.2 The System Operator shall offer to perform a supplemental review in accordance with section 2.4 and provide a non-binding good faith estimate of the costs of such review; or

2.3.3 The System Operator shall obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the section 3 Study Process.

### **2.4 Supplemental Review**

2.4.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing and submit a deposit to the System Operator for the estimated costs of the supplemental review in the

amount of the System Operator's and Interconnecting Transmission Owner's good faith estimate of the costs of such review, both within fifteen (15) Business Days of the offer. If the written agreement and deposit have not been received by the System Operator within that timeframe, the Interconnection Request shall continue to be evaluated under the section 3 Study Process unless it is withdrawn by the Interconnection Customer.

2.4.2 The Interconnection Customer must specify the order in which the System Operator in conjunction with the Interconnecting Transmission Owner will complete the screens in section 2.4.4.

2.4.3 The Interconnection Customer shall be responsible for the System Operator's and the Interconnecting Transmission Owner's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the System Operator and Interconnecting Transmission Owner will return such excess within twenty (20) Business Days of the invoice without interest.

2.4.4 Within thirty (30) Business Days following receipt of the deposit for a supplemental review, the System Operator shall (1) in conjunction with the Interconnecting Transmission Owner, perform a supplemental review using the screens set forth below; (2) notify in writing the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the System Operator's and Interconnecting Transmission Owner's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the System Operator shall notify the Interconnection Customer following the failure of any of the screens, or if the System Operator in conjunction with the Interconnecting Transmission Owner is unable to perform the screen in section 2.4.4.1, within two (2) Business Days of making such determination to request Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this section 2.4.4; (2) terminate the supplemental review and continue evaluating the Small Generating Facility under section 3; or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

2.4.4.1 Minimum Load Screen: Where twelve (12) months of line section minimum load data (including onsite load but not station service load served by the proposed Small Generating Facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the



aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Small Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the System Operator in conjunction with the Interconnecting Transmission Owner shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 2.4.4.

2.4.4.1.1 The type of generation used by the proposed Small Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 2.4.4.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV systems utilizing tracking systems), while all other generation uses absolute minimum load.

2.4.4.1.2 When this screen is being applied to a Small Generating Facility that serves some station service load, only the net injection into the Interconnecting Transmission Owner's electric system will be considered as part of the aggregate generation.

2.4. 4.1.3 The System Operator and the Interconnecting Transmission Owner will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

2.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

2.4.4.3 Safety and Reliability Screen: The location of the proposed Small Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The System Operator in conjunction with the Interconnecting Transmission Owner shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

2.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

2.4.4.3.2 Whether the loading along the line section is uniform or even.

2.4.4.3.3 Whether the proposed Small Generating Facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

2.4.4.3.4 Whether the proposed Small Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

2.4.4.3.5 Whether operational flexibility is reduced by the proposed Small Generating Facility, such that transfer of the line section(s) of the Small Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

2.4.4.3.6 Whether the proposed Small Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

2.4.5 If the proposed interconnection passes the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, the Interconnection Request shall be approved and the System Operator in conjunction with the Interconnecting Transmission Owner will provide the Interconnection Customer with an executable SGIA within the timeframes established in sections 2.4.5.1 and 2.4.5.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under the section 3 Study Process consistent with section 2.4.5.3 below.

2.4.5.1 If the proposed interconnection passes the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above and does not require construction of facilities by the Interconnecting Transmission Owner on its own system, the SGIA shall be provided within ten (10) Business Days after the notification of the supplemental review results.

2.4.5.2 If Interconnection Facilities or minor modifications to the Interconnecting Transmission Owner's system are required for the proposed interconnection to pass the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, and the Interconnection Customer agrees to pay for the modifications to the Interconnecting Transmission Owner's electric system, the SGIA, along with a non-binding good faith estimate for the Interconnection Facilities and/or minor modifications, shall be provided to the Interconnection Customer within fifteen (15) Business Days after receiving written notification of the supplemental review results.

2.4.5.3 If the proposed interconnection would require more than Interconnection Facilities or minor modifications to the Interconnecting Transmission Owner's system to pass the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, the System Operator shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results, that the Interconnection Request shall be evaluated under the section 3 Study Process unless the Interconnection Customer withdraws its Small Generating Facility.

## **SECTION 3. STUDY PROCESS**

### **3.1 Applicability**

The Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with the Administered Transmission System if the Small Generating Facility is no larger than 20 MW and does not meet the eligibility requirements of section 2.1 or does not pass the Fast Track Process or the 10 kW Inverter Process.

### **3.2 Scoping Meeting**

3.2.1 A scoping meeting will be held within ten (10) Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. The System Operator, the Interconnecting Transmission Owner, the Interconnection Customer and the Affected Party(ies) will bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting. Before participating in a scoping meeting with an Interconnection Customer that is also an Affiliate, the Interconnecting Transmission Owner shall post on the OASIS an advance notice of its intent to do so.

3.2.2 The purpose of the scoping meeting is to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request, including: (i) the estimated timeline for completing all

applicable Interconnection Studies, (ii) exchange pertinent information including any transmission data that would reasonably be expected to impact interconnection options, (iii) analyze such information, and (iv) determine the potential feasible Points of Interconnection, and (v) to discuss any other information necessary to facilitate the administration of the Interconnection Procedures. A PSCAD model is required for all wind and inverter-based Small Generating Facilities. If a PSCAD model is required for other Small Generating Facility types, the Parties shall discuss this at the Scoping Meeting. The Parties shall discuss whether the System Operator should perform an Interconnection Feasibility Study or proceed directly to an Interconnection System Impact Study, or an Interconnection Facilities Study, or an SGIA. If the Interconnection Customer provides the technical data called for in Attachment 2 (including Attachment A, if applicable) to this SGIP with the Interconnection Request, the Parties shall discuss the detailed project design at the Scoping Meeting.

Unless the Interconnection Request has been identified to be included in a CRPS or eligible for inclusion in a CSIS, within five (5) Business Days following the scoping meeting, the Interconnection Customer shall notify the System Operator, in writing: (i) whether it wants the Interconnection Feasibility Study to be completed, as a separate and distinct study or as part of the Interconnection System Impact Study, (ii) if requesting the Interconnection Feasibility Study be completed as a separate and distinct study, which of the alternative study scopes is being selected pursuant to Section 3.3.2, and (iii) the Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection for inclusion in the attachment to the Interconnection Feasibility Study Agreement (Attachment 6), or the Interconnection System Impact Study Agreement (Attachment 7) if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

3.2.3 The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested an Interconnection Feasibility Study must return the executed Interconnection Feasibility Study Agreement (or Interconnection System Impact Study Agreement if the Interconnection Customer elected not to pursue the Interconnection Feasibility Study), within fifteen (15) Business Days.

### **3.3 Interconnection Feasibility Study**

3.3.1 **Interconnection Feasibility Study Agreement.** Within five (5) Business Days following the Interconnection Customer's request for an Interconnection Feasibility Study, the System Operator shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement signed by the

System Operator and Interconnecting Transmission Owner, including an outline of the scope of the Interconnection Feasibility Study and a non-binding good faith estimate of the cost to perform the Interconnection Feasibility Study. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). No later than fifteen (15) Business Days after its receipt of the Interconnection Feasibility Study Agreement, the Interconnection Customer shall execute and deliver the agreement, including completed attachments, to System Operator and the Interconnecting Transmission Owner, together with the refundable deposit of the lesser of 50 percent of the good faith estimated Interconnection Feasibility Study costs or earnest money of \$1,000. The deposit shall be applied toward the cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection Feasibility Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer. The System Operator and/or Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Interconnection Feasibility Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner on the Interconnection Feasibility Study, including the development of the study agreement and its attachment(s). The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Feasibility Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. System Operator shall continue to hold any amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

**3.3.2 Scope of Interconnection Feasibility Study.** The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Administered Transmission System with available data and information. The Interconnection Feasibility Study will consider the Base Cases as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to

Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection Feasibility Study). An Interconnection Customer with a CNR Interconnection Request may also request that the Interconnection Feasibility Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer’s Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection Feasibility Study Agreement. The Interconnection Feasibility Study will consist of a power flow, including thermal analysis and voltage analysis, and short circuit analysis. The Interconnection Feasibility Study report will provide (i) a list of facilities and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct the Interconnection Facilities and Network Upgrades; (iii) a protection assessment to determine the required Interconnection Facilities; and may provide (iv) an evaluation of the siting of Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environmental work for Interconnection Facilities and Network Upgrades.

Alternatively, in the case where the Interconnection Customer requests that the Interconnection Feasibility Study be completed as a separate and distinct study, the Interconnection Customer may provide the technical data called for in Appendix 1, Attachment A with the executed Interconnection Feasibility Study Agreement and request that the Interconnection Feasibility Study consist of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Small Generating Facility’s interconnection given recent study experience and as discussed at the Scoping Meeting. In this case, the Interconnection Feasibility Study report will provide (i) the study findings; and, (ii) a preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Small Generating Facility as identified within the scope of the analysis performed as part of the study.

To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 3.3, the Interconnection Feasibility Study report will also provide a list of potential upgrades that may be

necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

**3.3.3 Interconnection Feasibility Study Procedures.** The System Operator in coordination with Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than thirty (30) Business Days after System Operator and Interconnecting Transmission Owner receive the fully executed Interconnection Feasibility Study Agreement, study deposit and required technical data in accordance with Section 3.3.1. At the request of the Interconnection Customer or at any time the System Operator or the Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the System Operator is unable to complete the Interconnection Feasibility Study within that time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

**3.3.4 Meeting with Parties.** Within ten (10) Business Days of providing an Interconnection Feasibility Study report to the Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Feasibility Study.

**3.3.5 Re-Study.** If re-study of the Interconnection Feasibility Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resources(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than thirty (30) Business Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection

Feasibility Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Feasibility Study Agreement. The Interconnection Customer shall have the option to waive the re-study and elect to have the re-study performed as part of its Interconnection System Impact Study. The Interconnection Customer shall provide written notice of the waiver and election of moving directly to the Interconnection System Impact Study within five (5) Business Days of receiving notice from the System Operator of the required re-study.

### **3.4 Interconnection System Impact Study**

**3.4.1 Interconnection System Impact Study Agreement.** Within five (5) Business Days following the Interconnection Feasibility Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer the Interconnection System Impact Study Agreement, which includes a non-binding good faith estimate of the cost and timeframe to perform the Interconnection System Impact Study. The Interconnection System Impact Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the SGIA.

**3.4.2 Execution of Interconnection System Impact Study Agreement.** The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement, including completed attachments, to the System Operator no later than fifteen (15) Business Days after its receipt along with (1) demonstration of Site Control, (2) a refundable deposit of 50 percent of the good faith estimated cost for the transmission portion of the Interconnection System Impact Study and 100 percent of the good faith estimated cost for the distribution portion of the Interconnection System Impact Study, and (3) a PSCAD model if one was determined to be needed at the Scoping Meeting; provided that if a PSCAD model was determined to be needed for the non-wind or non-inverter-based Small Generating Facility at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. The deposit shall be applied toward the cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the



cost of developing the SGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection System Impact Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer. The System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of Interconnection System Impact Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the System Impact Study, including the study agreement and its attachment(s) and the SGIA. In the case of Clustering, CSIS costs that are associated with an individual Interconnection Request assessed within the CSIS will be charged directly to that Interconnection Customer. CSIS costs that are associated with the CSIS as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster.

The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the transmission portion of the Interconnection System Impact Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

**3.4.3 Scope of Interconnection System Impact Study.** The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability and operation of the New England Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection System Impact Study). An Interconnection Customer with a CNR Interconnection

Request that elected to waive the Interconnection Feasibility Study may also request that the Interconnection System Impact Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection System Impact Study Agreement. The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis and any other analyses, such as electromagnetic transient analysis, that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner. The Interconnection System Impact Study report will state the assumptions upon which it is based, state the results of the analyses, and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Interconnection System Impact Study report will provide (i) a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility, (ii) a non-binding good faith estimated time to construct, (iii) a protection assessment to determine the required protection upgrades; and may provide (iv) an evaluation of the siting of the Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environmental work. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 3.4.3, the Interconnection System Impact Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

**3.4.4 Interconnection System Impact Study Procedures.** The System Operator shall coordinate the Interconnection System Impact Study with the Interconnecting Transmission Owner, and with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, that is affected by the Interconnection Request. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection System Impact Study within forty-five (45) Business Days after the receipt of the Interconnection System Impact Study Agreement, study deposit, demonstration of Site Control, if Site Control is required, and required technical data in accordance with Section 3.4.2. If the System Operator uses Clustering, the System Operator and Interconnecting

Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within the times specified in this Section 3.4.4. At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the System Operator and Interconnecting Transmission Owner are unable to complete the Interconnection System Impact Study within the time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

Except in the case of a CSIS, the System Operator shall notify the Interconnection Customer when the Interconnection System Impact Study is expected to commence within sixty-five (65) Calendar Days. An Interconnection Customer with an Interconnection Request being studied serially will be permitted to update the technical data provided in Attachment 2 of this SGIP and any attachments thereto, and submit modifications to that technical data to the System Operator no later than sixty (60) Calendar Days from the date that the System Operator notified the Interconnection Customer that the Interconnection System Impact Study is expected to commence. Such modifications will not be deemed Material Modifications unless the changes require a new Interconnection Request in accordance with Section 1.5.5 of this SGIP.

Where sufficient time has elapsed since the initial Scoping Meeting, within ten (10) Business Days after notifying the Interconnection Customer that the Interconnection System Impact Study is expected to commence, the System Operator may convene a second Scoping Meeting for the purpose of providing updated information to the Interconnection Customer in preparation for the submittal of updates to the technical data.

**3.4.5 Meeting with Parties.** Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, the System Operator shall convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, to discuss the results of the Interconnection System Impact Study. Within ten (10) Business Days following the study results meeting, the Interconnection Customer shall provide to the System Operator written notice that it will either pursue the Interconnection Facilities Study or waive the Interconnection Facilities Study and elect an expedited interconnection. Once the Interconnection Customer notifies the System Operator of its election, such election is not subject to change. If the

Interconnection Customer elects to pursue the Facilities Study it must proceed with the study. If the Interconnection Customer waives the Facilities Study, it shall commit to the following milestones in the SGIA: (i) Siting approval for the Generating Facility and Interconnection Facilities; (ii) Engineering of Interconnection Facilities approved by Interconnecting Transmission Owner; (iii) Ordering of long lead time material for Interconnection Facilities and system upgrades; (iv) Initial Synchronization Date; and (v) Commercial Operation Date.

Within thirty (30) Calendar Days of the Interconnection Customer receiving the Interconnection System Impact Study report, the Interconnection Customer shall provide written comments on the report or written notice that it has no comments on the report. The System Operator shall issue a final Interconnection System Impact Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving the Interconnection Customer's notice that it will not provide comments.

**3.4.6 Re-Study.** If re-study of the Interconnection System Impact Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resources(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than thirty (30) Business Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection System Impact Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection System Impact Study Agreement.

**3.4.7 Operational Readiness.** The System Operator shall, as close to the Interconnection Customer's actual Synchronization Date as reasonably possible, ensure that operational analysis, including current stability analyses, power flow analyses, and any other analyses deemed necessary by the System Operator, are performed, and that procedures are developed or updated to address the operation of the New England Transmission System with the addition of the Interconnection Customer's Generating Facility. The operational analysis will also include tests of system performance with selected facilities out of service. Such studies shall be performed at the expense of the Interconnection Customer. The

System Operator is not obligated to perform the operational analyses described in this Section 3.4.7 if, in the exercise of reasonable discretion, the System Operator in consultation with Interconnecting Transmission Owner determines that interconnection of the Interconnection Customer's Generating Facility to the Administered Transmission System is remote and speculative.

### **3.5 Interconnection Facilities Study**

**3.5.1 Interconnection Facilities Study Agreement.** Except as otherwise provided in Section 1.5.3.4 of this SGIP, the Interconnection Customer may waive the Interconnection Facilities Study and instead elect expedited interconnection and proceed with a SGIA in accordance with the requirements specified in Section 4.8. If the Interconnection Customer elects to proceed with an Interconnection Facilities Study, the System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Attachment 8 to this SGIP simultaneously with the delivery of the Interconnection System Impact Study report to the Interconnection Customer. The Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection Facilities Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the SGIA. Within five (5) Business Days following the Interconnection Customer's Interconnection System Impact Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to the Interconnection Customer the Interconnection Facilities Study Agreement along with a non-binding good faith estimate of the cost to perform the Interconnection Facilities Study. The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement, including completed attachments, to the System Operator within thirty (30) Business Days after its receipt, together with the required refundable deposit of the non-binding good faith estimated costs for the Interconnection Facilities Study. Any difference between the study deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer. The System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the cost of the Interconnection Facilities Studies that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Interconnection Facilities Study, the study agreement and its attachment(s) and the SGIA. In the case of Clustering, CFAC costs that are associated with an individual Interconnection Request assessed within the CFAC will be charged directly to that Interconnection Customer. CFAC costs that are associated with the CFAC as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. The System Operator

and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

**3.5.2 Scope of Interconnection Facilities Study.** The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Administered Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Interconnecting Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The scope and cost of the Interconnection Facilities Study shall include completion of any engineering work limited to what is reasonably required to (i) estimate such aforementioned cost, (ii) identify configurations of required facilities, and (iii) identify time requirements for construction and installation of required facilities. Design for any required Interconnection Facilities and/or Network Upgrades shall also be performed under the Interconnection Facilities Study. The Interconnection Customer, the System Operator, the Interconnecting Transmission Owner, and the Affected Party(ies), if any, may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design shall be reviewed and may be modified prior to acceptance by the Interconnecting Transmission Owner, under the provisions of the Interconnection Facilities Study Agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the System Operator and/or the Interconnecting Transmission Owner shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain any independent design and cost estimates for any necessary facilities.

**3.5.3 Interconnection Facilities Study Procedures.** The System Operator shall coordinate the Interconnection Facilities Study with Interconnecting Transmission Owner, and any Affected Party as

deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the study and the System Operator shall issue a draft Interconnection Facilities Study report to the Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: forty-five (45) Business Days if upgrades are necessary, or thirty (30) Business Days if upgrades are not necessary. If the System Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection Facilities Study within the times specified in this Section 3.5.3.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Facilities Study, System Operator shall notify the Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, as to the schedule status of the Interconnection Facilities Study. If the System Operator is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, the System Operator shall notify the Interconnection Customer, Interconnecting Transmission Owner and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and provide an estimated completion date and an explanation of the reasons why additional time is required. The Interconnection Customer and appropriate Affected Parties may, within thirty (30) Business Days after receipt of the draft report, provide written comments to the System Operator and Interconnecting Transmission Owner, which the System Operator shall include in the final report. The System Operator shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The System Operator may reasonably extend such fifteen-day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the System Operator or Interconnecting Transmission Owner to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities report. Upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer and any Affected Party as deemed appropriate by the System

Operator in accordance with applicable codes of conduct and confidentiality requirements, or any third party consultant retained by the Interconnection Customer or to any non-market affiliate of the Interconnection Customer supporting documentation, with workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study. The recipient(s) of such information shall be subject to the confidentiality provisions of this SGIP and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

**3.5.4 Meeting with Parties.** Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Facilities Study. Within thirty (30) Business Days of receipt of the study results, the Interconnection Customer shall provide written notice whether it agrees to pay for the Interconnection Facilities and upgrades identified in the Interconnection Facilities Study. An executable SGIA shall be tendered by the System Operator in conjunction with the Interconnecting Transmission Owner to the Interconnection Customer within five (5) Business Days of receipt of such agreement.

**3.5.5 Re-Study.** If re-study of the Interconnection Facilities Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall so notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than thirty (30) Business Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Facilities Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Facilities Study Agreement.



## **SECTION 4. PROVISIONS THAT APPLY TO ALL INTERCONNECTION REQUESTS**

### **4.1 Reasonable Efforts**

The System Operator and Interconnecting Transmission Owner shall make Reasonable Efforts to meet all time frames provided in these procedures unless the System Operator, the Interconnecting Transmission Owner and the Interconnection Customer agree to a different schedule. If the System Operator or Interconnecting Transmission Owner cannot meet a deadline provided herein, it shall notify the other Parties, explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.

### **4.2 Disputes**

4.2.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

4.2.2 In the event of a dispute, the Party initiating the dispute resolution process shall provide the other Party(ies) with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

4.2.3 If the dispute has not been resolved within two (2) Business Days after receipt of the Notice, any Party may contact the Commission's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

4.2.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

4.2.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for its own costs and its pro rata share of any costs paid to the neutral party and any associated common negotiating costs.

4.2.6 If none of the Parties elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then each Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these procedures.

### **4.3 Interconnection Metering**

Any metering necessitated by the use of the Small Generating Facility shall be installed at the Interconnection Customer's expense in accordance with Commission, state, or local regulatory requirements and with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

### **4.4 Commissioning**

Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards.

4.4.1 The System Operator and the Interconnecting Transmission Owner must be given at least five (5) Business Days written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present to witness the commissioning tests.

### **4.5 Confidentiality**

4.5.1 Confidential information shall mean any confidential and/or proprietary information provided by one Party to the other Party(ies) that is clearly marked or otherwise designated "Confidential." For purposes of these procedures all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed confidential information regardless of whether it is clearly marked or otherwise designated as such. Confidential information shall include, without limitation, all information treated as confidential under the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the others prior to the execution of an SGIA.

4.5.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party(ies) and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce these procedures. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under these procedures, or to fulfill legal or regulatory requirements.

4.5.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party(ies) as it employs to protect its own Confidential Information.

4.5.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

4.5.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if the Commission, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to these procedures, the Party shall provide the requested information to the Commission, within the time provided for in the request for information. In providing the information to the Commission, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by the Commission and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) prior to the release of the Confidential Information to the Commission. The Party shall notify the other Party(ies) when it is notified by the Commission that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **4.6 Comparability**

The System Operator shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. The System Operator and Interconnecting Transmission Owner shall use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Small Generating Facility is owned or operated by the Interconnecting Transmission Owner, its subsidiaries or affiliates, or others.

#### **4.7 Record Retention**

The System Operator shall maintain for three years records, subject to audit, of all Interconnection Requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

#### **4.8 SGIA**

In accordance with Section 3, the System Operator and the Interconnecting Transmission Owner shall tender to the Interconnection Customer a draft SGIA, together with draft attachments completed to the extent practicable. The Interconnection Customer shall return the Interconnection Customer specific information required to complete the form SGIA, including the attachments, within fifteen (15) Business Days. Within five (5) Business Days, the System Operator and the Interconnecting Transmission Owner shall issue a final draft of the SGIA to the Interconnection Customer.

The Interconnection Customer and the Interconnecting Transmission Owner shall have fifteen (15) Business Days or another mutually agreeable timeframe to sign three (3) originals of the SGIA and return them to the System Operator, who will send an original fully executed SGIA to Interconnecting Transmission Owner and Interconnection Customer, or the Interconnection Customer shall request that an unexecuted SGIA be filed with the Commission. If the Interconnection Customer does not sign the SGIA, or ask that it be filed unexecuted within thirty (30) Business Days after its receipt of the final draft of the SGIA, the Interconnection Request shall be deemed withdrawn. After the SGIA is signed by the Parties, the interconnection of the Small Generating Facility shall proceed under the provisions of the SGIA.

The Interconnection Customer, the Interconnecting Transmission Owner and the System Operator shall be Parties to the SGIA.

Within fifteen (15) Business Days after receipt of the final SGIA, an Interconnection Customer with an Interconnection Request studied using Clustering that provided the additional Cluster Participation Deposit in accordance with Section 1.5.3.4.4 shall provide to the Interconnecting Transmission Owner, in cash, a potentially non-refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades, including any CETUs, identified in the CFAC, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final SGIA. If the Interconnection Customer does not submit this deposit (or make the initial payment) by the fifteenth Business Day after receipt of the final SGIA, the Interconnection Request shall be automatically withdrawn from the interconnection queue without further opportunity to cure, and the Interconnection Customer's initial and additional Cluster Participation Deposits shall become non-refundable. The non-refundable initial and additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection

Requests included in the cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation. If an Interconnection Request is withdrawn after the Interconnection Customer's payment of twenty (20) percent of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner, then the payment shall be used to offset the costs of the CETU. Any unspent payments of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner will be refunded to the respective Interconnection Customers that executed the Interconnection Agreement and provided to the Interconnecting Transmission Owner the twenty (20) percent deposit (or initial payment) if all the associated Interconnection Requests are withdrawn from the interconnection queue and the associated Interconnection Agreements are terminated.

#### **4.9 Coordination with Affected Systems**

The System Operator shall coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System operators and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. The System Operator will include such Affected System operators in all meetings held with the Interconnection Customer as required by the SGIP. The Interconnection Customer will cooperate with the System Operator and the Interconnecting Transmission Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. The Interconnection Customer shall be responsible for the costs associated with the studies or portions of studies associated with the Affected Systems. Payment and refunds associated with the costs of such studies will be coordinated between the Interconnection Customer and the Affected Party(ies). The System Operator shall seek the cooperation of all Affected Parties in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Nothing in the foregoing is intended to authorize the Interconnection Customer to receive interconnection, related facilities or other services on an Affected System, and provision of such services must be handled through separate arrangements with Affected Parties.

#### **4.10 Evaluation of a Small Generating Facility Interconnection Request**

4.10.1 If the Interconnection Request is for an increase in capacity for an existing Small Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total energy capability or capacity capability of the Small Generating Facility.

4.10.2 If the Interconnection Request is for a Small Generating Facility that includes multiple energy production devices at a site for which the Interconnection Customer seeks a single Point of

Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of the multiple devices.

4.10.3 The Interconnection Request shall be evaluated using the maximum energy capability and capacity capability that the Small Generating Facility is capable of injecting into the Administered Transmission System. However, if the maximum energy capability and capacity capability that the Small Generating Facility is capable of injecting into the Administered Transmission System is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the System Operator's and Interconnecting Transmission Owner's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and reliability of the Administered Transmission System. If the System Operator and the Interconnecting Transmission Owner do not agree with the manner in which the Interconnection Customer proposes to implement the limit, then the Interconnection Request must be withdrawn or revised to specify the maximum energy capability and capacity capability that the Small Generating Facility is capable of injecting into the Administered Transmission System without such limitations. Furthermore, nothing in this section shall prevent the System Operator from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

## Glossary of Terms

**10 kW Inverter Process** – The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the section 2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See SGIP Attachment 5.

**Administered Transmission System** – The PTF and, the Non-PTF, ~~and distribution facilities that are subject to the Tariff.~~

**Affected Party**– The entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affected System** – Any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affiliate** – With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**At-Risk Expenditure** – Money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (i) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and surveys, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** – Base power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists provided by System Operator, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements; such databases and lists shall include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. Base Cases also include data provided by the Interconnection Customer, where applicable, to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** – The criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** – That portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** – The MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** – The study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.



**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** – The Interconnection Service selected by the Interconnection Customer to interconnect its Small Generating Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 1.5.3.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 1.5.3.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 1.5.3.3.2.2 and 1.5.3.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 1.5.3.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study

and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** – The status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** – For a unit, the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Standard Small Generator Interconnection Agreement.

**Distribution System** – The Interconnecting Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** – The additions, modifications, and upgrades to the Interconnecting Transmission Owner’s Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Fast Track Process** – The procedure for evaluating an Interconnection Request for a certified Small Generating Facility that meets the eligibility requirements of section 2.1 and includes the section 2 screens, customer options meeting, and optional supplemental review.

**Generating Facility** – The Interconnection Customer’s device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities.

**Initial Synchronization Date** – The date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** – The date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** – A Transmission Owner that owns, leases or otherwise possesses an interest, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Small Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Attachment 2 to the Standard Small Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** – Any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Small Generating Facility with the Administered Transmission System under the Standard Small Generator Interconnection Procedures.

**Interconnection Customer’s Interconnection Facilities** shall mean all facilities and equipment, as identified in Attachment 2 of the Standard Small Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer’s Interconnection Facilities are sole use facilities.

**Interconnection Facilities** – The Interconnecting Transmission Owner’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Administered Transmission System. Interconnection

Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** – A study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 3.5.2 of the Standard Small Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** – The form of agreement contained in Attachment 8 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** – A preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 3.3 of the Standard Small Generator Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and Section 3.4.

**Interconnection Feasibility Study Agreement** – The form of agreement contained in Attachment 6 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** – The Interconnection Request shall mean an Interconnection Customer's request, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed

Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of or add energy storage capability to the Small Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to 1.6.4 of this SGIP; (iv) make a modification to the operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected to the Administered Transmission System; (v) commence participation in the wholesale markets by, an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service for all or part of a Generating Facility's capability. Interconnection Request shall not include ~~:(i) a retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site; (ii) a request to interconnect a new Generating Facility to a distribution facility that is subject to the Tariff if the Generating Facility will not be used to make wholesale sales of electricity in interstate commerce; or (iii)~~ a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** – The service provided by the System Operator and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Small Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** – Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Small Generator Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** – Any of the following agreements: The Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, and the Interconnection Facilities Study Agreement attached to the Standard Small Generator Interconnection Procedures.

**Interconnection System Impact Study** – An engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other

Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Small Generator Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and Section 3.4.

**Interconnection System Impact Study Agreement** – The form of agreement contained in Attachment 7 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**Network Capability Interconnection Standard (“NC Interconnection Standard”)** – The minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Resource (“NR”)** – The portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** – The MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** – The Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard.

An Interconnection Customer's NR Interconnection Service shall be solely for the megawatt amount of the NR Capability. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** – Additions, modifications, and upgrades to the New England Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Administered Transmission System to accommodate the interconnection with the Small Generating Facility to the Administered Transmission System. Network Upgrades do not include Distribution Upgrades.

**Notice of Dispute** – A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

**Party**– The System Operator, Interconnecting Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Administered Transmission System.

**Queue Position** – The order of a valid request in the New England Control Area, relative to all other pending valid requests in the New England Control Area, that is established based upon the date and time of receipt of the valid Interconnection Request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a “higher-queued” Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as “lower-queued.”

**Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the SGIP or SGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** – A Generating Facility having a maximum gross capability at or above zero degrees F of 20 MW or less.

**Stand Alone Network Upgrades** – Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Attachment 2 to the Standard Small Generator Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 3.3.2 and 3.4.3 of this SGIP.

**Study Process** – The procedure for evaluating an Interconnection Request that includes the section 3 scoping meeting, Interconnection Feasibility Study, Interconnection System Impact Study, and Interconnection Facilities Study.

**Tariff** - The System Operator's or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

**Trial Operation** – The period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Upgrades** – The required additions and modifications to the Administered Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.



**SMALL GENERATOR INTERCONNECTION REQUEST  
(Application Form)**

An Interconnection Request is considered complete when it provides all applicable and correct information required below. Per SGIP Section 1.4, documentation of Site Control must be submitted with the Interconnection Request, except where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the proposed modifications do not require additional real property.

\_\_\_\_\_Site Control is not provided because the proposed modification is to the Interconnection Customer's existing Small Generating Facility and, by checking this option, the Interconnection Customer certifies that it has Site Control and that the proposed modification does not require additional real property.

**Preamble and Instructions**

An Interconnection Customer who requests a Federal Energy Regulatory Commission jurisdictional interconnection that is subject to this SGIP must submit this Interconnection Request to the System Operator via the Interconnection Request Tracking Tool or IRTT, a web-based application for submitting, tracking and viewing Interconnection Requests available on the ISO New England website.

**Processing Fee or Deposit:**

If the Interconnection Request is submitted under the Fast Track Process, the non-refundable processing fee is \$4.50/kW (minimum of \$300 and maximum of \$7,500). The kW are the maximum gross kW of the Small Generating Facility. The Fast Track Process is limited to a Small Generating Facility that meets the eligibility requirements of section 2.1 and certain codes, standards and certification requirements.

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the System Operator a non-refundable deposit of \$2,500 towards the cost of the scoping meeting, the development of the interconnection study agreements, interconnection studies, and

development of the SGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the non-refundable deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS.

**Interconnection Customer Information**

**Proposed Project Name:** \_\_\_\_\_

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: \_\_\_\_\_

ISO Customer ID# (if available): \_\_\_\_\_

Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

---

---

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Application is for:    \_\_\_\_\_ New Small Generating Facility  
                              \_\_\_\_\_ Capacity addition to or modification of an existing Small Generating Facility  
                              \_\_\_\_\_ Commencement of participation in the wholesale markets by an existing Small Generating Facility  
                              \_\_\_\_\_ A change from Network Resource Interconnection Service to Capacity Network Resource Interconnection Service

If capacity addition to or modification of an existing facility, please describe: \_\_\_\_\_

---

If the capacity addition increases the maximum gross megawatt electrical output at an ambient temperature of 20 degrees F of the Generating Facility to more than 20 MW, the Interconnection Customer shall apply under Schedule 22.

Will the Small Generating Facility be used for any of the following?

Net Metering? Yes \_\_\_\_ No \_\_\_\_

To Supply Power to the Interconnection Customer? Yes \_\_\_\_ No \_\_\_\_

To Supply Power to Others? Yes \_\_\_\_ No \_\_\_\_

Is the Interconnection Request for:

Service Type (check one):

\_\_\_\_\_ Capacity Network Resource Interconnection Service (energy capability and capacity capability) or

\_\_\_\_\_Network Resource Interconnection Service (energy capability only)

A retail customer interconnecting a new Small Generating Facility that will produce electric energy to be consumed only on the retail customer's site? Yes\_\_\_\_\_No\_\_\_\_\_

A Qualifying Facility where 100% of the output will be sold to its host utility?

Yes\_\_\_\_\_No\_\_\_\_\_

An Interconnection Customer interconnecting a new Small Generating Facility that plans to participate in the wholesale markets? Yes\_\_\_\_\_No\_\_\_\_\_

An existing Small Generating Facility commencing participation in the wholesale markets?

Yes\_\_\_\_\_No\_\_\_\_\_

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

\_\_\_\_\_  
(Local Electric Service Provider)

\_\_\_\_\_  
(Existing Account Number)

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

## Small Generating Facility Information

Interconnection Customer's Requested Initial Synchronization Date:

Interconnection Customer's Requested In-Service Date: \_\_\_\_\_

Interconnection Customer's Requested Commercial Operation Date: \_\_\_\_\_

Proposed Point of Interconnection: \_\_\_\_\_

Data apply only to the Small Generating Facility, not the Interconnection Facilities.

Energy Source: ☐ Solar ☐ Wind ☐ Hydro ☐ Hydro Type (e.g. Run-of-River): \_\_\_\_\_

☐ Diesel ☐ Natural Gas ☐ Fuel Oil ☐ Other (state type) \_\_\_\_\_

Prime Mover: ☐ Fuel Cell ☐ Recip Engine ☐ Gas Turb ☐ Steam Turb

☐ Microturbine ☐ PV ☐ Other

Type of Generator: ☐ Synchronous ☐ Induction ☐ Inverter

Generator Nameplate Rating: \_\_\_\_\_ kW (Typical) Generator Nameplate kVAR: \_\_\_\_\_

Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if none, so state)

Typical Reactive Load (if known): \_\_\_\_\_

Maximum Physical Export Capability Requested: \_\_\_\_\_ kW

Will the generator have energy storage capacity? Yes ☐ No ☐

If Yes, describe the energy storage device and specifications:

---

---

---

Provide the maximum output of each generator including each energy storage device: \_\_\_\_

Primary frequency response operating range for electric storage resources:

Minimum State of Charge: \_\_\_\_\_

Maximum State of Charge: \_\_\_\_\_

**Generating Facility Capacity (MW):**

	<b>Maximum Net MW Electrical Output</b>	<b>Maximum Gross MW Electrical Output</b>
<b>At 90 degrees F or higher</b>		
<b>At 50 degrees F or higher</b>		
<b>At 20 degrees F or higher</b>		
<b>At zero degrees F or higher</b>		

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package? \_\_\_Yes \_\_\_No

Generator (or solar collector)

Manufacturer, Model Name & Number: \_\_\_\_\_

Version Number: \_\_\_\_\_

Nameplate Output Power Rating in kW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in kVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Individual Generator Power Factor

Rated Power Factor: Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

Total Number of Generators in wind farm to be interconnected pursuant to this

Interconnection Request: \_\_\_\_\_ Elevation: \_\_\_\_\_ \_\_\_Single phase \_\_\_Three phase

Inverter Manufacturer, Model Name & Number (if used): \_\_\_\_\_

List of adjustable set points for the protective equipment or software: \_\_\_\_\_

### Model Requirements

For all generation types: A completed, fully functioning, public (*i.e.*, non-proprietary or non-confidential) Siemens PTI's ("PSSE") power flow model or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flow ("PSLF") data sheet, must be supplied with this Interconnection Request. If additional public data sheets are more appropriate to the proposed device then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.

A PSCAD model for all wind and inverter-based Small Generating Facilities must be supplied with this Interconnection Request. If a PSCAD model is deemed required for other Generating Facility types at the Scoping Meeting, such PSCAD model must be provided to the System Operator within ninety (90) Calendar Days of the executed Interconnection System Impact Study Agreement. A benchmarking analysis consistent with the requirements in the ISO New England Planning Procedures, confirming acceptable performance of the PSS/E model in comparison to the PSCAD model, shall be provided at the time the PSCAD model is submitted.

### Small Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: \_\_\_\_\_ Instantaneous \_\_\_\_ or RMS? \_\_\_\_\_

Harmonics Characteristics: \_\_\_\_\_

Start-up requirements: \_\_\_\_\_

### Small Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: \_\_\_\_\_

Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

Synchronous Generators:

Generator AC resistance  $R_a$ : \_\_\_\_\_

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ P.U.

Direct Axis Transient Reactance,  $X'_d$ : \_\_\_\_\_ P.U.

Direct Axis Subtransient Reactance,  $X''_d$ : \_\_\_\_\_ P.U.

Negative Sequence Reactance,  $X_2$ : \_\_\_\_\_ P.U.

Zero Sequence Reactance,  $X_0$ : \_\_\_\_\_ P.U.

KVA Base: \_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Induction Generators:

Motoring Power (kW): \_\_\_\_\_

$I_2^2t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance,  $R_r$ : \_\_\_\_\_

Stator Resistance,  $R_s$ : \_\_\_\_\_

Stator Reactance,  $X_s$ : \_\_\_\_\_

Rotor Reactance,  $X_r$ : \_\_\_\_\_

Magnetizing Reactance,  $X_m$ : \_\_\_\_\_

Short Circuit Reactance,  $X_d''$ : \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base



Note: Please contact the System Operator prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

**Interconnection Facilities Information**

Will a transformer be used between the generator and the point of common coupling? \_\_\_\_ Yes \_\_\_\_ No

Will the transformer be provided by the Interconnection Customer? \_\_\_\_ Yes \_\_\_\_ No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: \_\_\_\_ single phase \_\_\_\_ three phase? Size: \_\_\_\_\_ kVA

Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ kVA Base

If Three Phase:

Transformer Primary: \_\_\_\_ Volts \_\_\_\_ Delta \_\_\_\_ Wye \_\_\_\_ Wye Grounded

Transformer Secondary: \_\_\_\_ Volts \_\_\_\_ Delta \_\_\_\_ Wye \_\_\_\_ Wye Grounded

Transformer Tertiary: \_\_\_\_ Volts \_\_\_\_ Delta \_\_\_\_ Wye \_\_\_\_ Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Interconnecting Circuit Breaker (if applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_

Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_ Trip Speed (Cycles): \_\_\_\_\_

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

	Setpoint Function	Minimum	Maximum
11	_____	_____	_____
12	_____	_____	_____
13	_____	_____	_____
14	_____	_____	_____
15	_____	_____	_____
16	_____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:

\_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:

\_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:

\_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:

\_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:  
\_\_\_\_\_

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

Potential Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

**General Information**

Enclose two copies of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW. Are two copies of One-Line Diagram Enclosed? \_\_\_\_Yes \_\_\_\_No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Small Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) \_\_\_\_\_

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed? \_\_\_\_Yes \_\_\_\_No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? \_\_\_\_Yes \_\_\_\_No

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

In order for a Small Generator Interconnection Request to be considered a valid request, it must:

- (a) Be accompanied by the applicable deposit that is provided electronically and which shall be non-refundable;
- (b) Include documentation of Site Control, if applicable;
- (c) Include a detailed map, such as a map of the quality produced by the U.S. Geological Survey, which clearly indicates the site of the new facility and pertinent surrounding structures;
- (d) Include two copies, signed and stamped by a licensed Professional Engineer, of the site electrical one-line diagram; and
- (e) Include all information and data required on the Interconnection Request form and any attachments thereto.

The Interconnection Request must be submitted to the System Operator via the Interconnection Request Tracking Tool or IRTT.

## Attachment A to Interconnection Request Form

### SUPPLEMENTARY WIND AND INVERTER-BASED GENERATING FACILITY DATA FORM

- (a) Attach a Geographic Map Demonstrating the Project Layout and its Interconnection to the Power Grid. (Specify the name of the attachment here)
- (b) Attach a Bus-Breaker Based One-line Diagram (The diagram should include each of the individual wind unit, generator number, rating and terminal voltage.) (Specify the name of the attachment here)

**a. Collection system detail impedance sheet**

If a collector system is used, attach a collector system data sheet in accordance with the one-line diagram attached above. The data sheet should include: the type, length  $Z_0$ ,  $Z_1$  and  $X_c/B$  of each circuit (feeder and collector string).

Specify the name of the attachment here: \_\_\_\_\_

**b. Collection system aggregate (equivalent) model data sheet**

Attach an aggregate (equivalent) collection system data sheet. The data table should include: the type, length,  $Z_0$ ,  $Z_1$  and  $X_c/B$  of the equivalent circuits (feeders and collector strings).

Specify the name of the attachment here: \_\_\_\_\_

- (c) Summary of the Unit Models in the wind or inverter-based generating facility *(List all different unit models in the facility)*

Manufacturer Model	Type of this WTG* (if applicable)	Generator Unit Numbers in the field	Number(s) of these Units	Maximum Output of this Unit (MW)	Total MW

- \* Type 1 – Cage rotor induction generators
- Type 2 – Induction generators with variable rotor resistance
- Type 3 – Doubly-fed asynchronous generators with rotor-side converter
- Type 4 – Full-power converter interface

***Repeat the following sections from 4 to 12 for each different unit model.***

(d) Unit Detail Information

Unit Manufacturer Model	
Terminal Voltage	
Rating of Each Unit (MVA)	
Maximum Gross Electrical Output (MW)	
Minimum Gross Electrical Output(MW)	
Lagging Reactive Power Limit at Rated Real Power Output (MVAR)	
Leading Reactive Power Limit at Rated Real Power Output (MVAR)	
Lagging Reactive Power Limit at Zero Real Power Output (MVAR)	
Leading Reactive Power Limit at Zero Real Power Output (MVAR)	
Station Service Load(MW, MVAR)	
Minimum short circuit ratio(SCR) requirement by manufacturer	
On which bus the minimum SCR is required by manufacturer	
What voltage level the minimum SCR is required by manufacturer	
Positive sequence Xsource	
Zero sequence Xsource	

(e) Unit GSU – \_\_\_\_\_

Nameplate rating (MVA)	
Total number of the GSUs	
Voltages, generator side/system side	
Winding connections, low voltage/high voltage	
Available tap positions on high voltage side	
Available tap positions on low voltage side	
Will the GSU operate as an LTC?	
Desired voltage control range if LTC	
Tap adjustment time (Tap switching delay + switching time) if LTC	
Desired tap position if applicable	
Impedance, Z1, X/R ratio	
Impedance, Z0, X/R ratio	

(f) Low Voltage Ride Through(LVRT) – \_\_\_\_\_ (*Specify the Manufacturer Model of this Unit*)

Does each Unit have LVRT capability?

Yes\_\_ No\_\_

If yes, please provide:

**a. Unit LVRT mode activation and release condition:**

When operating at maximum real power, what is the Unit terminal voltage for LVRT mode activation? \_\_\_\_\_

When operating at maximum real power, what is the Unit terminal voltage for releasing LVRT mode after it is activated? \_\_\_\_\_

If there is different LVRT activation and release logic, please state here \_\_\_\_\_

**b. A wind or inverter-based generating facility technical manual from the manufacturer including description of LVRT functionality:**

***Attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- c. Does the wind or inverter-based generating facility technical manual attached above include a reactive power capability curve?

Yes\_\_

No\_\_

***If no, attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- (g) Low Voltage Protection (considering LVRT functionality)

(Specify the Manufacturer Model of this Unit)

Low Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

- (h) High Voltage Protection - \_\_\_\_\_(Specify the Manufacturer Model of this Unit)

High Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

- (i) Low Frequency Protection - \_\_\_\_\_(Specify the Manufacturer Model of this Unit)

Low Frequency Setting (Hz)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

10. High Frequency Protection - \_\_\_\_\_(Specify the Manufacturer Model of this Unit)

High Frequency Setting (Hz)	Relay Pickup Time (Seconds)




\*Add more rows in the table as needed

**Please make sure the settings in sections 7 through 10 comply with NERC and NPCC standards for generator protection relays.**

- Unit Reactive Power Control - \_\_\_\_ (Specify the Manufacturer Model of this Unit)

- a. What are the options for the Unit reactive power control (check all available)?

☐ Control the voltage at the Unit terminal  
☐ Control constant power factor at the Unit terminal  
☐ Control constant power factor at the low side of the station main transformer  
☐ Control constant power factor at the high side of the station main transformer  
☐ Control voltage at the low side of the station main transformer  
☐ Control voltage at the high side of the station main transformer  
☐ Other options. Please describe if select others

\_\_\_\_\_

- b. In all the control options selected above, please list the options in which the Unit is able to control its terminal voltage to prevent low/high voltage tripping.

\_\_\_\_\_

- 11.3 What is the desired control mode from the selected options above? Specify the control plan in this mode. For example: control voltage at which bus to what schedule.

\_\_\_\_\_

- 12. Wind or inverter-based generating facility Model

*(All model files provided under this section 12 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)*

- i. Power flow model

- i. A \*. RAW file including **aggregated/equivalent** wind or inverter-based generating facility power flow model with appropriate parameters and settings.

***Attach the \*.RAW file and specify the name of the attachment here:***

\_\_\_\_\_

- ii. A \*.RAW file including **detailed** wind or inverter-based generating facility power flow model with appropriate parameters and settings. *(Optional)*

***Attach the \*.RAW file and specify the name of the attachment here:***

\_\_\_\_\_

- ii. Dynamic simulation model

***(Please note that the dynamic model must match the aggregated/equivalent power flow model provided above. Attach the following information for each of the models.)***

- i. Wind or inverter-based generating facility Model \_\_\_\_\_(Please Specify the Manufacturer Model)
- ii. A compiled PSS/E dynamic model for the turbines (a \*.LIB or \*.OBJ file)

***Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:***

\_\_\_\_\_

- iii. A dynamic data file with appropriate parameters and settings for the turbines (typically a \*.DYN file)

***Attach the \*.DYN file and specify the name of the attachment here:***

\_\_\_\_\_

- iv. PSS/E wind or inverter-based generating facility model user manual for the WTG

***Attach and specify the name of the attachment here:***

\_\_\_\_\_

***Repeat the above sections from 6 to 12 for each different wind or inverter-based generating facility model.***

13. Power Plant Controller

Will the wind or inverter-based generating facility be equipped with power plant controller, which has the ability to centrally control the output of the units?

Yes\_\_\_ No\_\_\_

If yes, please provide:

- a. Manufacturer model of the power plant controller

\_\_\_\_\_

- b. What are the reactive power control strategy options of the power plant controller?

13.3 Which of the control option stated above is being used in current operation?

\_\_\_\_\_

- c. Is the power plant controller able to control the unit terminal voltages to prevent low/high voltage tripping?

Yes\_\_\_ No\_\_\_

Please provide the park controller technical manual from the manufacturer

***Attach the file and specify the name of the attachment here:***

\_\_\_\_\_

14. Station Transformer

Transformer Name		
Nameplate ratings (MVA)		
Total number of the main transformer(s)		
Voltages, High/Low/Tertiary (kV)		
Winding connections, High/Low/Tertiary		
Available tap positions on high voltage side		
Available tap positions on low voltage side		
Will the transformer operate as a LTC?		
Desired voltage control range if LTC		
Tap adjustment time (Tap switching delay + switching time) if LTC		
Desired tap position if applicable		
Tap adjustment time (Tap switching delay + switching time)		
Impedance $Z_1$ , X/R ratio	$Z_{1H-L}$	X/R
	$Z_{1H-T}$	X/R
	$Z_{1T-L}$	X/R
Impedance $Z_0$ , X/R ratio	$Z_{0H-L}$	X/R
	$Z_{0H-T}$	X/R
	$Z_{0T-L}$	X/R

- a. Dynamic Simulation Model for the Power Plant Controller(s) (if applicable )

***(All model files provided under this section 15 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)***

- a. A compiled PSS/E dynamic model for the power plant controller(s) (a \*.LIB or \*.OBJ file)

***Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:***

\_\_\_\_\_

- 15.2 A dynamic data file with appropriate parameters and settings for the power plant controller(s) (typically a \*.DYR file).

***Please set the parameters in accordance with the currently used control mode.***

***Attach the \*.DYZ file and specify the name of the attachment here:***

\_\_\_\_\_

15.3 PSS/E model user manual for the power plant controller(s)

***Attach the manual and specify the name of the attachment or specify the name of the attachment here:***\_\_\_\_\_

b. Capacitors and Reactors

Please provide necessary modeling data for all the capacitors and reactors belong to the facility, including: size, basic electrical parameters, connecting bus, switched or fixed, etc.

c. Dynamic Device(s)

***(All model files provided under this section 17 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)***

a. Provide necessary modeling data file for all the dynamic devices belong to the facility.

Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:

\_\_\_\_\_

b. A dynamic data file containing the parameters for the units (typically a \*.DYZ file).

Set the parameters in accordance with the desired control mode.

Attach the \*.DYZ file and specify the name of the attachment here:

\_\_\_\_\_

d. Collection System/Transformer Tap-Setting Design

Attach a collection system/transformer tap-setting design calculations, consistent with the requirements in the ISO New England Planning Procedures, that identify the calculations to support the proposed tap settings for the unit step-up transformers and the station step-up transformers.

Attach the design document and specify the name of the attachment here:

---

e. Additional Information

Are there any special features available to be implemented to the wind or inverter-based generating facility? Such as weak grid interconnection solutions, etc.

Specify the available features here:

---

***Insert the technical manual for each of the features listed above as objects (display as icons) or specify the name of the attachment here:*** \_\_\_\_\_

f. Provide PSCAD Model and Documentation for the wind or inverter-based generating facility, the Power Plant Controller(s) and Other Dynamic Devices for the wind or inverter-based generating facility.

***ISO will determine how much PSCAD work is needed from the wind or inverter-based generating facility based on its interconnection system conditions.***

### CLUSTER SYSTEM IMPACT STUDY APPLICATION FORM

The undersigned Interconnection Customer submits this form to request the inclusion of the Interconnection Request for its Small Generating Facility in a Cluster Interconnection System Impact Study pursuant to Section 1.5.3.3.2.2 of this SGIP.

To be included in a Cluster Interconnection System Impact Study, the following must be submitted together with this form to the System Operator by the Cluster Entry Deadline:

- a. Project Information:
  - a. Project Name: \_\_\_\_\_
  - b. Queue Position: \_\_\_\_\_
  - c. Is the Interconnection Request contractually associated with another Interconnection Request for an Elective Transmission Upgrade? Yes \_\_\_\_ No \_\_\_\_  
If yes, identify Queue Position of the associated Interconnection Request and provide evidence of the contractual commitment. Queue Position No.: \_\_\_\_\_
- b. Initial Cluster Participation Deposit as specified in Section 1.5.3.3.2.2.

#### **Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**Certification Codes and Standards**

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3



IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

**Certification of Small Generator Equipment Packages**

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in SGIP Attachment 3, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface

components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.

6.0 An equipment package does not include equipment provided by the utility.

7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

**10 kW Inverter Process**

**Solely applicable for Network Resource Interconnection Service**

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the System Operator.
- 2.0 The System Operator acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The System Operator in conjunction with the Interconnecting Transmission Owner evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The System Operator in conjunction with the Interconnecting Transmission Owner verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Small Generator Interconnection Procedures (SGIP). The System Operator has 15 Business Days to complete this process. Unless the System Operator in conjunction with the Interconnecting Transmission Owner determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the System Operator approves the Application and returns it to the Customer. Note to Customer: Please check with the System Operator before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the System Operator. Prior to parallel operation, the System Operator and Interconnecting Transmission Owner may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- 6.0 The System Operator in conjunction with the Interconnecting Transmission Owner notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Interconnecting Transmission Owner has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Interconnecting Transmission Owner is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Interconnecting Transmission Owner does not

inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.

- 7.0 Contact Information – The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the System Operator and the Interconnecting Transmission Owner, that contact information must be provided on the Application.
- 8.0 Ownership Information – Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed – This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

**Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW**

This Application is considered complete when it provides all applicable and correct information required below. Per SGIP section 1.4, documentation of Site Control must be submitted with the Interconnection Request, except where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. Additional information to evaluate the Application may be required.

Processing Fee

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer

Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Contact (if different from Interconnection Customer)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Owner of the facility (include % ownership by any electric utility): \_\_\_\_\_

### Small Generating Facility Information

Location (if different from above): \_\_\_\_\_

Electric Service Company: \_\_\_\_\_

Account Number: \_\_\_\_\_

Is the Interconnection Request for:

A retail customer interconnecting a new Small Generating Facility that will produce electric energy to be consumed only on the retail customer's site? Yes\_\_\_\_No\_\_\_\_

A Qualifying Facility where 100% of the output will be sold to its host utility?

Yes\_\_\_\_No\_\_\_\_

An Interconnection Customer interconnecting a new Small Generating Facility that plans to participate in the wholesale markets? Yes\_\_\_\_No\_\_\_\_

An existing Small Generating Facility commencing participation in the wholesale markets?

Yes\_\_\_\_No\_\_\_\_

Inverter Manufacturer:\_\_\_\_\_Model\_\_\_\_\_

Nameplate Rating: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA) \_\_\_\_\_ (AC Volts)

Single Phase \_\_\_\_\_ Three Phase\_\_\_\_\_

System Design Capacity: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA)

Prime Mover: Photovoltaic ☐ Reciprocating Engine ☐ Fuel Cell ☐

Turbine ☐ Other \_\_\_\_\_

Energy Source: Solar ☐ Wind ☐ Hydro ☐ Diesel ☐ Natural Gas ☐

Fuel Oil ☐ Other (describe) \_\_\_\_\_

Is the equipment UL1741 Listed? Yes\_\_\_\_No \_\_\_\_

If Yes, attach manufacturer's cut-sheet showing UL1741 listing

Estimated Installation Date: \_\_\_\_\_ Estimated In-Service Date: \_\_\_\_\_

The 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Attachments 3 and 4 of the Small Generator Interconnection Procedures (SGIP), or the Interconnecting Transmission Owner has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

**Interconnection Customer Signature**

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return the Certificate of Completion when the Small Generating Facility has been installed.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Contingent Approval to Interconnect the Small Generating Facility  
(For Internal use only)**

Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return of the Certificate of Completion.

Interconnecting Transmission Owner Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Application ID number: \_\_\_\_\_

Interconnecting Transmission Owner waives inspection/witness test? Yes\_\_\_No\_\_\_

System Operator Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Application ID number: \_\_\_\_\_



## Small Generating Facility Certificate of Completion

Is the Small Generating Facility owner-installed? Yes \_\_\_\_\_ No \_\_\_\_\_

Interconnection Customer: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Location of the Small Generating Facility (if different from above):

\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

### Electrician:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

License number: \_\_\_\_\_

Date Approval to Install Facility granted by the Interconnecting Transmission Owner: \_\_\_\_\_

Application ID number: \_\_\_\_\_

### Inspection:

The Small Generating Facility has been installed and inspected in compliance with the local building/electrical code of \_\_\_\_\_

Signed (Local electrical wiring inspector, or attach signed electrical inspection):

\_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

As a condition of interconnection, you are required to send/fax a copy of this form along with a copy of the signed electrical permit to (insert System Operator and Interconnecting Transmission Owner information below):

Name: \_\_\_\_\_

System Operator: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Fax: \_\_\_\_\_

Name: \_\_\_\_\_

Interconnecting Transmission Owner:

\_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Fax: \_\_\_\_\_

---

### **Approval to Energize the Small Generating Facility**

**(For Internal use only)**

Energizing the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

Interconnecting Transmission Owner Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

System Operator Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Terms and Conditions for Interconnecting an Inverter-Based  
Small Generating Facility No Larger than 10kW**

**1.0 Construction of the Facility**

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the System Operator approves the Interconnection Request (the "Application") and returns it to the Customer.

**2.0 Interconnection and Operation**

The Customer may operate Small Generating Facility and interconnect with the Interconnecting Transmission Owner's (the "Company") electric system once all of the following have occurred:

2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and

2.2 The Customer returns the Certificate of Completion to the System Operator and the Company, and

2.3 The Company has either:

2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or

2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or

2.3.3 The Company waives the right to inspect the Small Generating Facility.

2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.

2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

### 3.0 **Safe Operations and Maintenance**

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

### 4.0 **Access**

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

### 5.0 **Disconnection**

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

5.1 For scheduled outages upon reasonable notice.

5.2 For unscheduled outages or emergency conditions.

5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.

5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

### 6.0 **Indemnification**

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

## **7.0 Insurance**

The Parties agree to follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state.

## **8.0 Limitation of Liability**

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

## **9.0 Termination**

The agreement to operate in parallel may be terminated under the following conditions:

9.1 By the Customer

9.2 By providing written notice to the Company and the System Operator.

9.3 By the Company or the System Operator

9.4 If the Small Generating Facility fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.

## **10.0 Permanent Disconnection**

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

## **11.0 Survival Rights**

This Agreement shall continue in effect after termination to the extent necessary to allow or require any Party to fulfill rights or obligations that arose under the Agreement.

## **12. Assignment/Transfer of Ownership of the Facility**

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the System Operator and the Company.

## Interconnection Feasibility Study Agreement

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_ existing under the laws of the State of \_\_\_\_\_, ("Interconnecting Transmission Owner"). Interconnection Customer, System Operator and Interconnecting Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."

### RECITALS

**WHEREAS**, Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Small Generating Facility with the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has requested the System Operator and Interconnecting Transmission Owner to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Small Generating Facility with the facilities that are part of the Interconnecting Transmission Owner's Administered Transmission System, and of any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures ("SGIP"), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the "Tariff").

- 2.0 The Interconnection Customer elects and the System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection Feasibility Study consistent the standard Small Generator Interconnection Procedures in accordance with the Open Access Transmission Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. The System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with the standard Small Generator Interconnection Procedures. If the Interconnection Customer modifies its Interconnection Request, the time to complete the Interconnection Feasibility Study may be extended by agreement of the Parties.
- 5.0 In performing the study, the System Operator and Interconnecting Transmission Owner shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the Interconnection Feasibility Study.
- 6.0 The Interconnection Feasibility Study report shall provide the following analyses depending on whether the Feasibility Study consisted of: (a) a power flow, including thermal analysis and voltage analysis, and short circulated analysis, or (b) limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the interconnection of the Small Generating Facility as proposed given recent study experience and as discussed at the Scoping Meeting:
  - 6.1 Initial identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection, or, findings of the limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most

significant for the proposed Small Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting;

- 6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Small Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting;
  - 6.3 Preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Small Generating Facility as identified within the scope of the analysis performed as part of the study;
  - 6.4 If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, initial review of grounding requirements and electric system protection;
  - 6.5 If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, description and non-binding estimated cost of facilities required to interconnect the proposed Small Generating Facility and to address the identified short circuit and power flow issues and length of time that would be necessary to construct the facilities; and
  - 6.6 To the extent the Interconnection Customer requested a preliminary analysis as described in Section 3.3.2 of the SGIP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.
- 7.0 The Interconnection Feasibility Study shall model the impact of the Small Generating Facility regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generating Facility is being installed.
  - 8.0 The study shall include the feasibility of any interconnection at a proposed project site where there could be multiple potential Points of Interconnection, as requested by the Interconnection Customer and at the Interconnection Customer's cost.



- 9.0 A deposit, paid to the System Operator, of the lesser of 50 percent of good faith estimated Interconnection Feasibility Study costs or earnest money of \$1,000 shall be required from the Interconnection Customer.
- 10.0 Once the Interconnection Feasibility Study is completed, an Interconnection Feasibility Study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the Interconnection Feasibility Study must be completed and the Interconnection Feasibility Study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct an Interconnection Feasibility Study.
- 11.0 The total estimated cost of the performance of the Interconnection Feasibility Study consists of \$ [insert], which is comprised of the System Operator's cost of \$[insert] and the Interconnecting Transmission Owner's cost of \$[insert]. The Interconnection Customer may be invoiced on a monthly basis for work to be conducted. 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator shall refund such excess within 30 calendar days of the invoice without interest.
- 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator shall refund such excess within 30 calendar days of the invoice without interest
- 13.0 Miscellaneous.
- 13.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.
- 13.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Feasibility Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or

participating in the Interconnection Feasibility Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Feasibility Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Feasibility Study, the content of the Interconnection Feasibility Study, or the conclusions of the Interconnection Feasibility Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 13.3 Force Majeure, Liability and Indemnification.

13.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all Reasonable Efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

13.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or

omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 13.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be

reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 13.4 Third-Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns. Notwithstanding the foregoing, and without limitation of Sections 13.2 and 13.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Feasibility Study shall not be deemed third party beneficiaries of Sections 13.2 and 13.3.
- 13.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.5, shall continue in effect for a term of one year or until the Interconnection Feasibility Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 1.8 of the SGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 13.6 Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

- 13.7 Severability. If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority: (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of this Agreement shall remain in full force and effect.
- 13.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 13.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 13.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.11 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 13.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect. Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the System Operator and the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.
- 13.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each

and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.

13.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

13.15 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

13.15.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the System Operator or Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

13.15.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

13.16 Reservation of Rights. Subject to the TOA, the System Operator and the Interconnecting Transmission Owner shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates,

terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of System Operator]**

**[Insert name of Interconnection Customer]**

\_\_\_\_\_  
Signed\_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title\_\_\_\_\_

\_\_\_\_\_  
Signed\_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title\_\_\_\_\_

**[Insert name of Interconnecting Transmission Owner]\**

\_\_\_\_\_  
Signed\_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title\_\_\_\_\_



**Attachment A to  
Interconnection Feasibility Study Agreement**

**Assumptions Used in Conducting the Interconnection Feasibility Study**

The Interconnection Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the scoping meeting held on \_\_\_\_\_:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
  
  
  
  
  
  
  
  
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer, System Operator and Interconnecting Transmission Owner.

**Interconnection System Impact Study Agreement**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_  
20\_\_ by and between \_\_\_\_\_,  
a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_,  
("Interconnection Customer,") and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_  
existing under the laws of the State of \_\_\_\_\_,  
("Interconnecting Transmission Owner"). Interconnection Customer, System Operator and Interconnecting Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generating Facility with the Administered Transmission System;

**WHEREAS**, the System Operator and Interconnecting Transmission Owner have completed an Interconnection Feasibility Study and provided the results of said study to the Interconnection Customer (This recital to be omitted if the Parties have agreed to forego the Interconnection Feasibility Study.); and

**WHEREAS**, the Interconnection Customer has requested the System Operator and Interconnecting Transmission Owner to perform an Interconnection System Impact Study(s) to assess the impact of interconnecting the Small Generating Facility with the facilities that are part of the Interconnecting Transmission Owner's Administered Transmission System, and of any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the

Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection System Impact Study(s) consistent with the standard Small Generator Interconnection Procedures in accordance with the Open Access Transmission Tariff.
- 3.0 The scope of an Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 An Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by Interconnection Customer in the Interconnection Request. The System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 An Interconnection System Impact Study shall consist of a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews, as necessary. An Interconnection System Impact Study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. An Interconnection System Impact Study shall provide a list of facilities that are required as a result of the Interconnection Request and non-binding good faith estimates of cost responsibility and time to construct.

- 6.0 A distribution Interconnection System Impact Study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.
- 7.0 Affected Systems may participate in the preparation of an Interconnection System Impact Study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment upon an Interconnection System Impact Study that covers potential adverse system impacts on their electric systems, and the System Operator and Interconnecting Transmission Owner have 20 additional Business Days to complete an Interconnection System Impact Study requiring review by Affected Systems.
- 8.0 If the System Operator uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the Interconnection System Impact Study shall consider all generating facilities (and with respect to paragraph 8.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced.
- 8.1 Are directly interconnected with the Administered Transmission System; or
- 8.2 Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and
- 8.3 Have a pending higher queued Interconnection Request to interconnect with the Administered Transmission System.
- 9.0 A distribution Interconnection System Impact Study, if required, shall be completed and the results transmitted to the Interconnection Customer within 30 Business Days after this Agreement is signed by the Parties. A transmission Interconnection System Impact Study, if required, shall be completed and the results transmitted to the Interconnection Customer within 45 Business Days after this Agreement is signed by the Parties.
- 10.0 A deposit of the equivalent of the good faith estimated cost of a distribution Interconnection System Impact Study shall be paid to the System Operator by the Interconnection Customer; and

the one half the good faith estimated cost of a transmission Interconnection System Impact Study shall be paid to the System Operator by the Interconnection Customer.

11.0 The total estimated cost of the performance of the Interconnection System Impact Study consists of \$[insert], which is comprised of the System Operator's cost of \$[insert] and the Interconnecting Transmission Owner's cost of \$[insert]. The Interconnection Customer may be invoiced on a monthly basis for work to be conducted.

12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator or Interconnecting Transmission Owner, as applicable, shall refund such excess within 30 calendar days of the invoice without interest.

13.0 Miscellaneous.

13.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

a) Disclaimer of Warranty. In preparing and/or participating in the Interconnection System Impact Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection System Impact Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection System Impact Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection System Impact Study, the content of the Interconnection System Impact Study, or the conclusions of the Interconnection System

Impact Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

b) Force Majeure, Liability and Indemnification.

13.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all Reasonable Efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

13.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other

liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 13.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement ("TOA") or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 13.4 Third-Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns. Notwithstanding the foregoing, and without limitation of Sections 13.2 and 13.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection System Impact Study shall not be deemed third party beneficiaries of Sections 13.2 and 13.3.
- 13.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.5, shall continue in effect for a term of one year or until the Interconnection System Impact Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 1.8 of the SGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 13.6 Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 13.7 Severability. If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority: (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of this Agreement shall remain in full force and effect.
- 13.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.



- 13.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 13.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.11 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 13.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect. Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the System Operator and the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.
- 13.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 13.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a

third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

- 13.15 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

13.15.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the System Operator or Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

13.15.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

- 13.16 Reservation of Rights. Subject to the TO Agreement, the System Operator and the Interconnecting Transmission Owner shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the

Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of System Operator]      [Insert name of Interconnection Customer]**

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

**[Insert name of Interconnecting Transmission Owner]**

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

**Attachment A to System  
Impact Study Agreement**

**Assumptions Used in Conducting the System Impact Study**

The Interconnection System Impact Study shall be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with the standard Small Generator Interconnection Procedures, and the following assumptions:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
  
  
  
  
  
  
  
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer, System Operator and Interconnecting Transmission Owner.

**Interconnection Facilities Study Agreement**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_  
20\_\_ by and between \_\_\_\_\_,  
a \_\_\_\_\_ organized and existing under the laws of the State of  
\_\_\_\_\_, ("Interconnection Customer,") and ISO New  
England Inc., a non-stock corporation existing under the laws of the State of Delaware ("System  
Operator"), and  
\_\_\_\_\_, a \_\_\_\_\_  
existing under the laws of the State of \_\_\_\_\_,  
("Interconnecting Transmission Owner"). Interconnection Customer, System Operator and  
Interconnecting Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generating Facility or  
generating capacity addition to an existing Small Generating Facility consistent with the Interconnection  
Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generating Facility with the  
Administered Transmission System;

**WHEREAS**, the System Operator and Interconnecting Transmission Owner have completed an  
Interconnection System Impact Study and provided the results of said study to the Interconnection  
Customer; and

**WHEREAS**, the Interconnection Customer has requested the System Operator and Interconnecting  
Transmission Owner to perform an Interconnection Facilities Study to specify and estimate the cost of the  
equipment, engineering, procurement and construction work needed to implement the conclusions of the  
Interconnection System Impact Study in accordance with Good Utility Practice to physically and  
electrically connect the Small Generating Facility with the facilities that are part of the Interconnecting  
Transmission Owner's Administered Transmission System.

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures, or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 The Interconnection Customer elects and the System Operator and Interconnecting Transmission Owner shall cause an Interconnection Facilities Study consistent with the standard Small Generator Interconnection Procedures to be performed in accordance with the Open Access Transmission Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to data provided in Attachment A to this Agreement.
- 4.0 The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the Interconnection System Impact Study(s). The Interconnection Facilities Study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Interconnecting Transmission Owner’s Interconnection Facilities and Upgrades necessary to accomplish the interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities.
- 5.0 The System Operator and Interconnecting Transmission Owner may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Small Generating Facility if it is willing to pay the costs of those facilities.
- 6.0 A deposit, paid to the System Operator, of the good faith estimated Interconnection Facilities Study costs shall be required from the Interconnection Customer.
- 7.0 In cases where Upgrades are required, the Interconnection Facilities Study must be completed within 45 Business Days of the receipt of this Agreement. In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the Interconnection Facilities Study must be completed within 30 Business Days.

- 8.0 Once the Interconnection Facilities Study is completed, an Interconnection Facilities Study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the Interconnection Facilities Study must be completed and the Interconnection Facilities Study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct an Interconnection Facilities Study.
- 9.0 The total estimated cost of the performance of the Interconnection Facility Study consists of \$ [insert], which is comprised of the System Operator's cost of \$[insert] and the Interconnecting Transmission Owner's cost of \$[insert]. The Interconnection Customer may be invoiced on a monthly basis for work to be conducted.
- 10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator or Interconnecting Transmission Owner, as applicable, shall refund such excess within 30 calendar days of the invoice without interest.
- 11.0 Miscellaneous.
- 11.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.
- 11.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Facilities Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Facilities Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Facilities Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of



law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Facilities Study, the content of the Interconnection Facilities Study, or the conclusions of the Interconnection Facilities Study.

Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

a) Force Majeure, Liability and Indemnification.

11.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all Reasonable Efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

11.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System

Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 11.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting

Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 11.4 Third-Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns. Notwithstanding the foregoing, and without limitation of Sections 11.2 and 11.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Facilities Study shall not be deemed third party beneficiaries of Sections 11.2 and 11.3.
- 11.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 11.5, shall continue in effect for a term of one year or until the Interconnection Facilities Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 1.8 of the SGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 11.6 Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_(where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 11.7 Severability. If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority: (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore

insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of this Agreement shall remain in full force and effect.

- 11.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 11.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 11.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 11.11 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 11.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect. Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the System Operator and the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.
- 11.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.

- 11.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.
- 11.15 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.
- 11.15.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the System Operator or Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 11.15.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.
- 11.16 Reservation of Rights. Subject to the TOA, the System Operator and the Interconnecting Transmission Owner shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate

fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of System Operator]**      **[Insert name of Interconnection Customer]**

_____	_____
Signed_____	Signed_____
Name (Printed):	Name (Printed):
_____	_____
Title_____	Title_____

**[Insert name of Interconnecting Transmission Owner]**

\_\_\_\_\_

Signed\_\_\_\_\_

Name (Printed):

\_\_\_\_\_

Title\_\_\_\_\_

**Attachment A to  
Interconnection Facilities Study Agreement**

**Data to Be Provided by the Interconnection Customer  
with the Interconnection Facilities Study Agreement**

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

On the one-line diagram, indicate the generation capacity attached at each metering location.  
(Maximum load on Current Transformer/Power Transformer ("CT/PT"))

On the one-line diagram, indicate the location of auxiliary power. (Minimum load on CT/PT)  
Amps

One set of metering is required for each generation connection to the new ring bus or existing  
Transmission Provider station. Number of generation connections: \_\_\_\_\_

Will an alternate source of auxiliary power be available during CT/PT maintenance?  
Yes \_\_\_\_ No \_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the  
total plant generation? Yes \_\_\_\_ No \_\_\_\_  
(Please indicate on the one-line diagram).

What type of control system or Power Line Carrier ("PLC") will be located at the Small Generating  
Facility?

---

---

What protocol does the control system or PLC use?

---

---

Please provide a 7.5-minute quadrangle map of the site. Indicate the plant, station, transmission line, and property lines.

Physical dimensions of the proposed interconnection station:

---

Bus length from generation to interconnection station:

---

Line length from interconnection station to Administered Transmission System.

---

Tower number observed in the field. (Painted on tower leg)\*:

---

Number of third party easements required for transmission lines\*:

---

\* To be completed in coordination with Transmission Provider.

Is the Small Generating Facility located in Transmission Provider's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ If No, please provide name of local provider:



---

Please provide the following proposed schedule dates:

Begin Construction Date: \_\_\_\_\_

Generator step-up transformers  
receive back feed power Date: \_\_\_\_\_

Generation Testing Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

**STANDARD SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**

## **TABLE OF CONTENTS**

### **Article. 1. Scope and Limitations of Agreement**

- 1.1 Applicability
- 1.2 Purpose
- 1.3 No Agreement to Purchase or Deliver Power
- 1.4 Limitations
- 1.5 Responsibilities of the Parties
- 1.6 Parallel Operation Obligations
- 1.7 Metering
- 1.8 Reactive Power and Primary Frequency Response
- 1.9 Capitalized Term
- 1.10 Scope of Service

### **Article. 2. Inspection, Testing, Authorization, and Right of Access**

- 2.1 Equipment Testing and Inspection
- 2.2 Authorization Required Prior to Parallel Operation
- 2.3 Right of Access

### **Article. 3. Effective Date, Term, Termination, and Disconnection**

- 3.1 Effective Date
- 3.2 Term of Agreement
- 3.3 Termination
- 3.4 Temporary Disconnection
  - 3.4.1 Emergency Conditions
  - 3.4.2 Routine Maintenance, Construction, and Repair
  - 3.4.3 Forced Outages
  - 3.4.4 Adverse Operating Effects
  - 3.4.5 Modification of the Small Generating Facility
  - 3.4.6 Reconnection

### **Article. 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

- 4.1 Interconnection Facilities
- 4.2 Distribution Upgrades

### **Article. 5. Cost Responsibility for Network Upgrades**

- 5.1 Applicability
- 5.2 Network Upgrades

5.3 Special Provisions for Affected Systems

5.4 Rights Under Other Agreements

**Article.6. Billing, Payment, Milestones, and Financial Security**

6.1 Billing and Payment Procedures and Final Accounting

6.2 Milestones

6.3 Financial Security Arrangements

**Article. 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

7.1 Assignment

7.2 Limitation of Liability

7.3 Indemnity

7.4 Consequential Damages

7.5 Force Majeure

7.6 Default

**Article. 8. Insurance Requirements**

8.1 General Liability

8.2 Insurer Requirements and Endorsements

8.3 Evidence of Insurance

8.4 Self Insurance

8.5 Interconnecting Transmission Owner Insurance

**Article. 9. Confidentiality**

**Article. 10. Disputes**

**Article. 11. Taxes**

**Article. 12. Miscellaneous**

12.1 Governing Law, Regulatory Authority, and Rules

12.2 Amendment

12.3 No Third-Party Beneficiaries

12.4 Waiver

12.5 Entire Agreement

12.6 Multiple Counterparts

12.7 No Partnership

12.8 Severability

12.9 Security Arrangements

12.10 Environmental Releases

12.11 Subcontractors

12.12 Reservation of Rights

**Article. 13. Notices**

13.1 General

13.2 Billing and Payment

13.3 Alternative Forms of Notice

13.4 Designated Operating Representative

13.5 Changes to the Notice Information

**Article. 14. Signatures**

Attachments to SGIA

Attachment 1 – Glossary of Terms

Attachment 2 – Description and Costs of the Small Generating Facility, Interconnection Facilities, and  
Metering Equipment

Attachment 3 – One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities,  
Metering Equipment, and Upgrades

Attachment 4 – Milestones

Attachment 5 – Additional Operating Requirements for the New England Transmission System and  
Affected Systems Needed to Support the Interconnection Customer's Needs

Attachment 6 – Interconnecting Transmission Owner's Description of its Upgrades and Best Estimate of  
Upgrade Costs

Attachment 7 – Commercial Operation Date

**THIS STANDARD SMALL GENERATOR INTERCONNECTION AGREEMENT ("Agreement")**

is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Small Generating Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnecting Transmission Owner"). Under this Agreement the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a "Party" or collectively as the "Parties."

In consideration of the mutual covenants set forth herein, the Parties agree as follows

**Article 1. Scope and Limitations of Agreement**

**1.1 Applicability:**

This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Attachment 5.

**1.2 Purpose**

This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Interconnecting Transmission Owner's facilities that are part of the Administered Transmission System.

**1.3 No Agreement to Purchase or Deliver Power**

This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Party.

#### 1.4 Limitations

Nothing in this Agreement is intended to affect any other agreement between the Parties.

#### 1.5 Responsibilities of the Parties

- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.
- 1.5.3 The Interconnecting Transmission Owner shall construct, operate, and maintain its transmission facilities and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.
- 1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems.
- 1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Interconnecting Transmission Owner and the Interconnection Customer, as appropriate, shall provide Interconnection

Facilities that adequately protect the New England Transmission System [or Interconnecting Transmission Owner's transmission facilities], personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The System Operator, with input from the Interconnecting Transmission Owner, shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure “frequency ride through” capability and “voltage ride through” capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to Article 2.1 of this Agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Interconnecting Transmission Owner's automatic load-shed program. The System Operator and Interconnecting Transmission Owner shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term “ride through” as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis. The term “frequency ride through” as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards



and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis. The term “voltage ride through” as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to the ISO New England Operating Documents, and the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Interconnecting Transmission Owner’s reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachment 2 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

#### 1.8 Reactive Power and Primary Frequency Response

##### 1.8.1 Power Factor Design Criteria

1.8.1.1 Synchronous Generation. The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection with dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, unless the System Operator or Interconnecting Transmission Owner has established different

requirements that apply to all similarly situated synchronous (and non-wind non-synchronous generators as specified in Appendix G, Section A.ii.4, to the LGIA) generators on a comparable basis and in accordance with Operating Requirements.

1.8.1.2 Non-Synchronous Generation. Generating Facilities shall be subject to the power factor design criteria specified in Appendix G to the LGIA. Wind and inverter-based Generating Facilities shall be subject to the Low Voltage Ride-Through Capability requirements specified in Appendix G to the LGIA.

1.8.2 Interconnection Customers shall be compensated for reactive power service in accordance with Schedule 2 of the Tariff.

1.8.3 Primary Frequency Response

Interconnection Customer with an Interconnection System Impact Study that commenced before May 15, 2018 is obligated to provide and maintain a functioning governor on all generating units comprising the Small Generating Facility in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnection Customer with an Interconnection System Impact Study that commenced on or after May 15, 2018 shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Small Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability

Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify System Operator and Interconnecting Transmission Owner that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the New England Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Articles 1.8.3.1 and 1.8.3.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.3.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the New England Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with System Operator and Interconnecting Transmission Owner, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to System Operator and Interconnecting Transmission Owner upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify System Operator and Interconnecting Transmission Owner, and provide both with the following

information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the New England Transmission System.

1.8.3.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

1.8.3.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Articles 1.8.3, 1.8.3.1, and 1.8.3.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to

install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Article 1.8.3, but shall be otherwise exempt from the operating requirements in Articles 1.8.3, 1.8.3.1, 1.8.3.2, and 1.8.3.4 of this Agreement.

1.8.3.4 Electric Storage Resources. Interconnection Customer interconnecting a Small Generating Facility that is an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Articles 1.8.3, 1.8.3.1, 1.8.3.2 and 1.8.3.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by System Operator, Interconnecting Transmission Owner and Interconnection Customer. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Article 1.8.3.2 of this Agreement when it is online and dispatched to inject electricity to the New England Transmission System and/or receive electricity from the New England Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the New England Transmission System and/or dispatched to receive electricity from the New England Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency

deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement. Capitalized terms in Schedule 23 that are not defined in the Glossary of Terms shall have the meanings specified in Sections I.2.2. of the Tariff.

1.10 Scope of Service

1. 10.1 Interconnection Product Options. Interconnection Customer has selected the following (checked) type of Interconnection Service:

☐ NR for NR Interconnection Service (NR Capability Only)

☐ CNR for CNR Interconnection Service (NR Capability and CNR Capability)

1.10.1.1 Capacity Network Resource Interconnection Service (CNR Interconnection Service)

- a. The Product. The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and the Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which all other CNRs are interconnected under the CC Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Small Generating Facility to be designated as a CNR to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the net CNR Capability, or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as all other existing Capacity Network Resources, and to be studied as a Capacity Network Resource on the assumption that such a designation will occur.

1.10.1.2 Network Resource Interconnection Service (NR Interconnection Service).

- a. The Product. The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which all other Network Resources are interconnected under the NC Interconnection Standard.

NR Interconnection Service allows the Interconnection Customer's Small Generating Facility to participate in the New England Markets, in accordance with Market Rule, Section III of the Tariff, up to the gross and net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff. Notwithstanding the above, the portion of a Small Generating Facility that has been designated as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNR Interconnection Service.

- 1.10.1.3 Provision of Service. System Operator and Interconnecting Transmission Owner shall provide Interconnection Service for the Small Generating Facility at the Point of Interconnection.
- 1.10.1.4 Performance Standards. Each Party shall perform all of its obligations under this SGIA in accordance with Applicable Laws and Regulations, the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such requirements and standards, such Party shall not be deemed to be in Breach of this SGIA for its compliance therewith. If such Party is the Interconnecting Transmission Owner, then that Party shall amend the SGIA and System Operator, in conjunction with the Interconnecting Transmission Owner, shall submit the amendment to the Commission for approval.
- 1.10.1.5 No Transmission Service Delivery. The execution of this SGIA does not constitute a request for, nor the provision of, any service except for

Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service, or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

- 1.10.1.6 Transmission Delivery Service Implications. CNR Interconnection Service and NR Interconnection Service allow the Interconnection Customer's Small Generating Facility to be designated by any Network Customer under the Tariff on the New England Transmission System as a Capacity Network Resource or Network Resource, up to the net CNR Capability or NR Capability, respectively, on the same basis as all other existing Capacity Network Resources and Network Resources interconnected to the New England Transmission System, and to be studied as a Capacity Network Resource or a Network Resource on the assumption that such a designation will occur. Although CNR Interconnection Service and NR Interconnection Service do not convey a reservation of transmission service, any Network Customer can utilize its network service under the Tariff to obtain delivery of capability from the Interconnection Customer's Small Generating Facility in the same manner as it accesses Capacity Network Resources and Network Resources. A Small Generating Facility receiving CNR Interconnection Service or NR Interconnection Service may also be used to provide Ancillary Services, in accordance with the Tariff and Market Rule 1, after technical studies and/or periodic analyses are performed with respect to the Small Generating Facility's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Capacity Network Resource or Network Resource. However, if an Interconnection Customer's Small Generating Facility has not been designated as a Capacity Network Resource or as a Network Resource by any load, it cannot be required to provide Ancillary Services except to the extent such requirements extend to all Generating Facilities that are similarly situated.



CNR Network Interconnection Service and NR Interconnection Service do not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Small Generating Facility to any particular load on the New England Transmission System without incurring congestion costs. In the event of transmission constraints on the New England Transmission System, the Interconnection Customer's Small Generating Facility shall be subject to the applicable congestion management procedures for the New England Transmission System in the same manner as other Capacity Network Resources or Network Resources.

There is no requirement either at the time of study or interconnection, or at any point in the future, that the Interconnection Customer's Small Generating Facility be designated as a Capacity Network Resource or as a Network Resource by a Network Customer under the Tariff or that the Interconnection Customer identify a specific buyer (or sink). To the extent a Network Customer does designate the Small Generating Facility as either a Capacity Network Resource or a Network Resource, it must do so pursuant to the Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining CNR Interconnection Service or NR Interconnection Service, as long as the Small Generating Facility has not been deemed to be retired, any future transmission service request for delivery from the Small Generating Facility on the New England Transmission System of any amount of capacity capability and/or energy capability will not require that any additional studies be performed or that any further upgrades associated with such Small Generating Facility be undertaken, regardless of whether or not such Small Generating Facility is ever designated by a Network Customer as a Capacity Network Resource or Network Resource and regardless of changes in ownership of the Small Generating Facility. To the extent the Interconnection Customer enters into an arrangement for long-term transmission service for deliveries from the Small Generating Facility outside the New England Transmission System, or if the unit has been deemed to be

retired, such request may require additional studies and upgrades in order for Interconnecting Transmission Owner to grant such request.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### **2.1 Equipment Testing and Inspection**

- 2.1.1. The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the System Operator and the Interconnecting Transmission Owner of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Interconnecting Transmission Owner may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Interconnecting Transmission Owner a written test report when such testing and inspection is completed.
- 2.1.2 The Interconnecting Transmission Owner shall provide the Interconnection Customer and the System Operator written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Interconnecting Transmission Owner of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### **2.2 Authorization Required Prior to Parallel Operation**

- 2.2.1 The Interconnecting Transmission Owner [and System Operator] shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Interconnecting Transmission Owner shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Interconnecting Transmission Owner shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting

requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the New England Transmission System [or Interconnecting Transmission Owner's transmission facilities] without prior written authorization of the Interconnecting Transmission Owner. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Interconnecting Transmission Owner may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Interconnecting Transmission Owner at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Interconnecting Transmission Owner shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

**Article 3. Effective Date, Term, Termination, and Disconnection**

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by the Commission (if applicable), or if filed unexecuted, upon the date specified by the Commission. System Operator and Interconnecting Transmission Owner shall promptly file this Agreement with the Commission upon execution, if required.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and by mutual agreement of the Parties shall remain in effect for a period of \_\_\_\_ years, (Term to be specified in individual Agreements, but in no case should the term be less than ten years from the Effective Date or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with the Commission of a notice of termination of this Agreement (if required), which notice has been accepted for filing by the Commission.

3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the System Operator and Interconnecting Transmission Owner 20 Business Days written notice.

3.3.2 Each Party may terminate this Agreement after Default pursuant to article 7.6.

3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Interconnecting Transmission Owner's Interconnection Facilities. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.

3.3.4 The termination of this Agreement shall not relieve any Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions

“Emergency Condition” shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, the Interconnecting Transmission Owner’s Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. The System Operator and the Interconnecting Transmission Owner may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility in accordance with applicable provisions of the Operating Requirements. The System Operator and Interconnecting Transmission Owner shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the System Operator and Interconnecting Transmission Owner promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the New England Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the

operation of the Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

### 3.4.2 Routine Maintenance, Construction, and Repair

3.4.2.1 Outage Authority and Coordination. The System Operator shall have the authority to coordinate facility outages in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Each Party may in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, in coordination with the other Party(ies), remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's(ies') facilities as necessary to perform maintenance or testing or to install or replace equipment, subject to the oversight of System Operator in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

3.4.2.2 Outage Schedules. Outage scheduling, and any related compensation, shall be in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

3.4.2.3 Interruption of Service. In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, the System Operator or Interconnecting Transmission Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect System Operator's or Interconnecting Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the New England Transmission System.

### 3.4.3 Forced Outages

During any forced outage, the Interconnecting Transmission Owner [and the System Operator] may suspend interconnection service to effect immediate repairs on the New

England Transmission System. The Interconnecting Transmission Owner shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Interconnecting Transmission Owner shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The Interconnecting Transmission Owner shall notify the Interconnection Customer and the System Operator as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the New England Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Interconnecting Transmission Owner may disconnect the Small Generating Facility. The Interconnecting Transmission Owner shall provide the Interconnection Customer and the System Operator with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

#### 3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from: (1) the Interconnecting Transmission Owner before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Interconnecting Transmission Owner's Interconnection Facilities; and (2) the System Operator before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the New England Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the System Operator's or the Interconnecting Transmission Owner's, as appropriate, prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

#### 3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the New England Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

### **Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

#### 4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Interconnecting Transmission Owner shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Interconnecting Transmission Owner.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Interconnecting Transmission Owner's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Interconnecting Transmission Owner shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Interconnecting Transmission Owner and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer. The Interconnection Customer shall be responsible for its share of all reasonable expenses, associated with operating, maintaining, repairing, and replacing such



Distribution Upgrades, except to the extent that a retail tariff of, or an agreement with, the Interconnecting Transmission Owner or its distribution company affiliate, if appropriate, provides otherwise.

## **Article 5. Cost Responsibility for Network Upgrades**

### **5.1 Applicability**

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades, including Stand Alone Network Upgrades.

### **5.2 Network Upgrades**

The Interconnecting Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Interconnecting Transmission Owner and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Interconnecting Transmission Owner elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne by the Interconnection Customer.

5.2.1.1 Cost Allocation. Cost allocation of Generator Interconnection Related Upgrades shall be in accordance with Schedule 11 of Section II of the Tariff.

5.2.1.2 Compensation. Any compensation due to the Interconnection Customer for increases in transfer capability to the PTF resulting from its Generator Interconnection Related Upgrade shall be determined in accordance with Sections II and III of the Tariff.

### **5.3 Special Provisions for Affected Systems**

The Interconnection Customer shall enter into separate related facilities agreements to address any upgrades to the Affected System(s) that are necessary for safe and reliable interconnection of the Interconnection Customer's Small Generating Facility.

#### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades.

### **Article 6. Billing, Payment, Milestones, and Financial Security**

#### 6.1 Billing and Payment Procedures and Final Accounting

6.1.1 The Interconnecting Transmission Owner shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

6.1.2 Within three months of completing the construction and installation of the Interconnecting Transmission Owner's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Interconnecting Transmission Owner for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Interconnecting Transmission Owner shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Interconnecting Transmission Owner within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Interconnecting Transmission Owner shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.

## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party(ies) of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless (1) it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Interconnecting Transmission Owner's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Interconnecting Transmission Owner a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Interconnecting Transmission Owner in accordance with Section 7 of Schedule 11 of the Tariff. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Interconnecting Transmission Owner's Interconnection Facilities and Upgrades. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Interconnecting Transmission Owner, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 16.2.1 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Interconnecting Transmission Owner and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

Notwithstanding any other provision of this Agreement, the liability, indemnification and insurance provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnection Transmission Owner and the liability, indemnification and insurance provisions of the Tariff apply to the relationship between the System Operator and the Interconnection Customer and between the Interconnecting Transmission Owner and the Interconnection Customer.

### **7.1 Assignment**

This Agreement may be assigned by a Party upon 15 Business Days prior written notice and opportunity to object by the other Parties; provided that:

- 7.1.1 The Parties may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the other Parties of any such assignment.
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Interconnecting Transmission Owner or the System Operator, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Interconnecting Transmission Owner and the System Operator of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party(ies) for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall a Party be liable to another Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's(ies') action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying Party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, in no event shall a Party be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party(ies), either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party(ies) informed on a continuing basis of

developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party(ies). Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party(ies) shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not those Parties terminate this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance Requirements**

### 8.1 General Liability

The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all

reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Interconnecting Transmission Owner, except that the Interconnection Customer shall show proof of insurance to the Interconnecting Transmission Owner no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

## 8.2 Insurer Requirements and Endorsements

All required insurance shall be carried by reputable insurers qualified to underwrite insurance in the state where the interconnection is located having a Best Rating of “A-”. In addition, all insurance shall, (a) include Interconnecting Transmission Owner and System Operator as additional insureds; (b) contain a severability of interest clause or cross-liability clause; (c) provide that Interconnecting Transmission Owner and System Operator shall not incur liability to the insurance carrier for payment of premium for such insurance; and (d) provide for thirty (30) calendar days’ written notice to Interconnecting Transmission Owner and System Operator prior to cancellation, termination, or material change of such insurance; provided that to the extent the Interconnection Customer is satisfying the requirements of subpart (d) of this paragraph by means of a presently existing insurance policy, the Interconnection Customer shall only be required to make good faith efforts to satisfy that requirement and will assume the responsibility for notifying the Interconnecting Transmission Owner and System Operator as required above.

If the requirement of clause (a) in the paragraph above prevents Interconnection Customer from obtaining the insurance required without added cost or due to written refusal by the insurance carrier, then upon Interconnection Customer’s written notice to Interconnecting Transmission Owner and System Operator, the requirements of clause (a) shall be waived.

## 8.3 Evidence of Insurance



Evidence of the insurance required shall state that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by Interconnection Customer.

The Interconnection Customer is responsible for providing the Interconnecting Transmission Owner and the System Operator with evidence of insurance in compliance with this Tariff on an annual basis.

Prior to the Interconnecting Transmission Owner commencing work on Interconnection Facilities, Network Upgrades and Distribution Upgrades, the Interconnection Customer shall have its insurer furnish to the Interconnecting Transmission Owner and the System Operator certificates of insurance evidencing the insurance coverage required above. The Interconnection Customer shall notify and send to the Interconnecting Transmission Owner and the System Operator a certificate of insurance for any policy written on a "claims-made" basis. The Interconnecting Transmission Owner and the System Operator may at their discretion require the Interconnection Customer to maintain tail coverage for three years on all policies written on a "claims-made" basis.

#### 8.4 Self Insurance

If Interconnection Customer is a company with a self-insurance program established in accordance with commercially acceptable risk management practices, Interconnection Customer may comply with the following in lieu of the above requirements as reasonably approved by the Interconnecting Transmission Owner and the System Operator:

- 1) Interconnection Customer shall provide to Interconnecting Transmission Owner and System Operator, at least thirty (30) calendar days prior to the Date of Initial Operation, evidence of such program to self-insure to a level of coverage equivalent to that required.
- 2) If Interconnection Customer ceases to self-insure to the standards required hereunder, or if Interconnection Customer is unable to provide continuing evidence of Interconnection Customer's financial ability to self-insure, Interconnection Customer agrees to promptly obtain the coverage required under Article 8.1.

#### 8.5 Interconnecting Transmission Owner Insurance

The Interconnecting Transmission Owner agrees to maintain general liability insurance or self-insurance consistent with the Interconnecting Transmission Owner's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Interconnecting Transmission Owner's liabilities undertaken pursuant to this Agreement.

### **Article 9. Confidentiality**

9.1 Confidential Information shall include without limitation, all information governed by the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, and any confidential and/or proprietary information provided by a Party to the another Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party(ies) and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party(ies) as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

- 9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if the Commission, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to the Commission, within the time provided for in the request for information. In providing the information to the Commission, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by the Commission and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) to this Agreement prior to the release of the Confidential Information to the Commission. The Party shall notify the other Party(ies) to this Agreement when it is notified by the Commission that a request to release Confidential Information has been received by the Commission, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

- 10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 10.2 In the event of a dispute, a Party shall provide the other Party(ies) with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, any Party may contact the Commission's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- 10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

- 10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for its pro-rata share of any costs paid to neutral third-parties.
- 10.6 If no Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then each Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

## **Article 11. Taxes**

- 11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with Commission policy and Internal Revenue Service requirements.
- 11.2 Each Party shall cooperate with the other to maintain the other Party's(ies') tax status. Nothing in this Agreement is intended to adversely affect the Interconnecting Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

## **Article 12. Miscellaneous**

### **12.1 Governing Law, Regulatory Authority, and Rules**

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

### **12.2 Amendment**

The Parties may amend this Agreement by a written instrument duly executed by the Parties, or under article 12.12 of this Agreement.

### **12.3 No Third-Party Beneficiaries**

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 12.4 Waiver

The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.1 Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, this Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, there are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Parties.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of the New England Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Commission expects the System Operator, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected to the New England Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party(ies), first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation

activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party(ies). The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party(ies) copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party(ies) for the performance of such subcontractor.

12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party(ies) for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

Consistent with Section 4.8 of Schedule 23, the Interconnecting Transmission Owner and the System Operator shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act

and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party(ies) and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### **13.1 General**

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:

[To be supplied]

If to the Interconnecting Transmission Owner:

[To be supplied]

If to the System Operator:

ISO New England Inc.

Attention: Generation Interconnection, Transmission Planning Department

One Sullivan Road

Holyoke, MA 01040-2841

Phone: \_\_\_\_\_ Fax: 413-540-4203

With a copy to:

Billing Department



ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner[To be supplied]

System Operator: ISO New England Inc.

Attention: Generation Interconnection, Transmission Planning Department  
One Sullivan Road  
Holyoke, MA 01040-2841  
Phone: \_\_\_\_\_ Fax: 413-540-4203

With a copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by a Party to the other Party(ies) and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_

If to the Interconnecting Transmission Owner:

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

If to the System Operator:

Phone: \_\_\_\_\_ Fax: 413-540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

With a copy to:

Billing Department

Facsimile: (413) 535-4024

E-mail: [billingdept@iso-ne.com](mailto:billingdept@iso-ne.com)

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

[To be supplied]

Interconnecting Transmission Owner's Operating Representative:

[To be supplied]

System Operator's Operating Representative:

ISO New England Inc.

Attention: Generation Interconnection, Transmission Planning Department

One Sullivan Road

Holyoke, MA 01040-2841

Phone: \_\_\_\_\_ Fax: (413) 540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

DUNS Numbers:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner: [To be supplied]

### 13.5 Changes to the Notice Information

A Party may change this information by giving five Business Days written notice prior to the effective date of the change.

**Article 14.      Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

***[Insert name of]* (Interconnecting Transmission Owner)**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***[Insert name of]* (Interconnection Customer)**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ISO New England Inc. (System Operator)**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **ATTACHMENTS TO SGIA**

Attachment 1	Glossary of Terms
Attachment 2	Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment
Attachment 3	One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment and Upgrades
Attachment 4	Milestones
Attachment 5	Additional Operating Requirements for the New England Transmission System and Affected Systems Needed to Support the Interconnection Customer's Needs
Attachment 6	Interconnecting Transmission Owner's Description of its Upgrades, and Best Estimates of Upgrade Costs
Attachment 7	Commercial Operation Date

## Glossary of Terms

**Administered Transmission System** – The PTF and, the Non-PTF, ~~and distribution facilities that are subject to the Tariff.~~

**Affected Party**– The entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affected System** – Any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affiliate** – With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Standards** – The requirements and guidelines of NERC, NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Systems.

**At-Risk Expenditure** – Money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (1) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and survey, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** – Base power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists provided by System Operator, Interconnecting Transmission Owner, and any

Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements; such databases and lists shall include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. Base Cases also include data provided by the Interconnection Customer, where applicable, to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** – The criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources and Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** – That portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** – The MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** – The study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** - The Interconnection Service selected by the Interconnection Customer to interconnect its Small Generating Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFS”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 1.5.3.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 1.5.3.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 1.5.3.3.2.2 and 1.5.3.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 1.5.3.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study



and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** – The status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** – The date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Attachment 7 to the Standard Small Generator Interconnection Agreement.

**Default** – The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** – The Interconnecting Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** – The additions, modifications, and upgrades to the Interconnecting Transmission Owner’s Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Generating Facility** – The Interconnection Customer’s device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities.

**Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Initial Synchronization Date** – The date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** – The date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner's Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** – A Transmission Owner that owns, leases or otherwise possesses an interest in, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Small Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner's Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Attachment 2 to the Standard Small Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner's Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** – Any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Small Generating Facility with the Administered Transmission System under the Standard Small Generator Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Attachment 2 of the Standard Small Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** – The Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include

all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** – A study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner’s Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 3.5 of the Standard Small Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** – The form of agreement contained in Attachment 8 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** – A preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 3.3 of the Standard Small Generator Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and Section 3.4.

**Interconnection Feasibility Study Agreement** – The form of agreement contained in Attachment 6 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** – The Interconnection Request (a) shall mean an Interconnection Customer's request, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of or add energy storage capability to the Small Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to 1.6.4 of this SGIP; (iv) make a modification to the operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected to the Administered Transmission System; (v) commence participation in the wholesale markets by an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service for all or part of a Generating Facility's capability. Interconnection Request shall not include: ~~(i) a retail customer interconnecting a new Generating Facility that will produce electric energy to be consumed only on the retail customer's site; (ii) a request to interconnect a new Generating Facility to a distribution facility that is subject to the Tariff if the Generating Facility will not be used to make wholesale sales of electricity in interstate commerce; or (iii)~~ a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** – The service provided by the System Operator and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Small Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** – Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Small Generator Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** – Any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, and the Interconnection Facilities Study Agreement attached to the Standard Small Generator Interconnection Procedures.

**Interconnection System Impact Study** – An engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Small Generator Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and 3.4.

**Interconnection System Impact Study Agreement** – The form of agreement contained in Attachment 7 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**Network Capability Interconnection Standard (“NC Interconnection Standard”)**– The minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Resource (“NR”)** – The portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** – The MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** – The Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s NR Interconnection Service shall be solely for the megawatt amount of the NR Capability. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** – Additions, modifications, and upgrades to the New England Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Administered Transmission System to accommodate the interconnection of the Small Generating Facility with the Administered Transmission System. Network Upgrades do not include Distribution Upgrades.

**Notice of Dispute** – A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

**Operating Requirements** – Any operating and technical requirements that may be applicable due to System Operator or the Interconnecting Transmission Owner’s requirements, including those set forth in the Small Generator Interconnection Agreement, ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**Party**– The System Operator, Interconnecting Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Administered Transmission System.

**Queue Position** -- The order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a “higher-queued” Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as “lower-queued.”

**Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** – A Generating Facility having a maximum gross capability at or above zero degrees F of 20 MW or less.

**Stand Alone Network Upgrades** – Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Attachment 2 to the Standard Small Generator Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 3.3.2 and 3.4.3 of this SGIP.

**Study Process** – The procedure for evaluating an Interconnection Request that includes the section 3 scoping meeting, Interconnection Feasibility Study, Interconnection System Impact Study, and Interconnection Facilities Study.

**Tariff** – The System Operator's or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

**Trial Operation** – The period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Upgrades** – The required additions and modifications to the Administered Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

*Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer or the Interconnecting Transmission Owner. The Interconnecting Transmission Owner will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.*

**I. DESCRIPTION OF MAJOR COMPONENTS**

**A. Small Generating Facility**

**(1) Description of Small Generating Facility.**

[insert]

**(2) The Small Generating Facility shall receive:**

\_\_\_\_ Network Resource Interconnection Service for the NR Capability at a level not to exceed [insert gross and net at or above 50 degrees F] MW for Summer, and [insert gross and net at or above 0 degrees F] MW for Winter.

\_\_\_\_ Capacity Network Resource Interconnection Service for: (a)(i) the NR Capability at a level not to exceed [insert gross and net at or above 50 degrees F] MW for Summer and [insert gross and net at or above 0 degrees F] MW for Winter; and (ii) the CNR Capability at [insert net] MW for Summer and [insert net] MW for Winter, which shall not exceed [insert the maximum net MW electrical output of the Generating Facility at an ambient temperature at or above 90 degrees F for summer and at or above 20 degrees F for winter].



- (3) Detailed Description of Small Generating Facility and Generator Step-Up Transformer, if applicable:

<b>Generator Data</b>	
Number of Generators	
Manufacturer	
Model	
Designation of Generator(s)	
Excitation System Manufacturer	
Excitation System Model	
Voltage Regulator Manufacturer	
Voltage Regulator Model	
<b>Generator Ratings</b>	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 90 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 50 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 20 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above zero Degrees F	
Station Service Load For Each Unit	
Overexcited Reactive Power at Rated MVA and Rated Power Factor	
Underexcited Reactive Power at Rated MVA and Rated Power Factor	

Generator Short Circuit and Stability Data	
Generator MVA rating	
Generator AC Resistance	
Subtransient Reactance (saturated)	
Subtransient Reactance (unsaturated)	
Transient Reactance (saturated)	
Negative sequence reactance	
Transformer Data	
Number of units	
Self Cooled Rating	
Maximum Rating	
Winding Connection (LV/LV/HV)	
Fixed Taps	
Z1 primary to secondary at self cooled rating	
Z1 primary to tertiary at self cooled rating	
Z1 secondary to tertiary at self cooled rating	
Positive Sequence X/R ratio primary to secondary	
Z0 primary to secondary at self cooled rating	
Z0 primary to tertiary at self cooled rating	
Z0 secondary to tertiary at self cooled rating	
Zero Sequence X/R ratio primary to tertiary	

B. Interconnection Facilities

[insert]

C. Metering Equipment

[insert]

D. Other Components

[insert]

II. INTERCONNECTION EQUIPMENT OWNERSHIP, OPERATION AND MAINTENANCE

A. Point of Change of Ownership; Point of Interconnection

[insert]

B. Description of Responsibilities

[insert]

III. PRICING ESTIMATES

A. Interconnection Facilities

[insert]

B. Metering Equipment

[insert]

C. Operation and Maintenance

[insert]

### **Attachment 3**

#### **One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades**

*[insert]*

### Milestones

- 1) **Milestones and Other Requirements:** The description and entries listed in the following table establish the required Milestones in accordance with the provisions of the SGIP and this SGIA. The referenced section of the SGIP or article of the SGIA should be reviewed to understand the requirements of each milestone.

Item No.	Milestone Description	Responsible Party	Date	SGIP/SGIA Reference
1	Submit updated data “as purchased”	Interconnection Customer	No later than 180 Calendar Days prior to Initial Synchronization Date	
2	Submit supplemental and/or updated data “as built/as-tested”	Interconnection Customer	Prior to Commercial Operation Date	
3	Provide quarterly written progress reports	Interconnection Customer and Interconnecting Transmission Owner	15 Calendar Days after the end of each quarter beginning the quarter that includes the date for Milestone #3 below and ending when the entire Small Generating Facility and all	

			required Interconnection Facilities and Network Upgrades are in place	
4	Deliver to Transmission Owner “as built” drawings, information and documents regarding Interconnection Customer’s Interconnection Facility	Interconnection Customer	If requested, within 120 Calendar Days after Commercial Operation date	

**2) Milestones Applicable If Facilities Study Has Been Waived by Interconnection Customer:**

<b>Item No.</b>	<b>Milestone Description</b>	<b>Responsible Party</b>	<b>Date</b>	<b>SGIP/SGIA Reference</b>
1	Siting approval for the Generating Facility and Interconnection Facilities	Interconnection Customer	As agreed to by the Parties	SGIP § 3.4.5(i)
2	Engineering of Interconnection Facilities approved by Interconnecting Transmission Owner	Interconnection Customer	As agreed to by the Parties	SGIP § 3.4.5(ii)
3	Commit to the ordering of long lead time material	Interconnection Customer	As agreed to by the Parties	SGIP § 3.4.5(iii)

	for Interconnection Facilities and system upgrades			
4	In-Service Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	
5	Initial Synchronization Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	SGIP § 3.4.5(iv)
6	Commercial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	SGIP § 3.4.5(v)

- 3) **Milestones Applicable Solely for CNR Interconnection Service.** In addition to the Milestones above, the following Milestones apply to Interconnection Customers requesting CNR Interconnection Service:

Item #	Milestone	Responsible Party	Date	SGIP/SGIA Reference
1	Submit necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date, in accordance with Section III.13 of the Tariff	Interconnection Customer		1.7.1.3(i)
2	Participate in a CNR Group Study	Interconnection Customer; System Operator		1.7.1.3(ii)

3	Qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff	Interconnection Customer		1.7.1.3(iii)
4	Complete a re-study of the applicable Interconnection Study to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request based on the results of the Forward Capacity Auction, Reconfiguration Auction or bilateral transaction through which the Interconnection Customer received a Capacity Supply Obligation	System Operator		1.7.1.3(iv)



**Additional Operating Requirements for the  
New England Transmission System and Affected Systems Needed to Support  
the Interconnection Customer's Needs**

*The Interconnecting Transmission Owner shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the New England Transmission System.*

**I. OPERATING REQUIREMENTS**

*[Insert]*

**Interconnecting Transmission Owner's  
Description of its Upgrades  
and Best Estimate of Upgrade Costs**

*The Interconnecting Transmission Owner shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Interconnecting Transmission Owner shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.*

**I. DESCRIPTION OF UPGRADES**

**A. Distribution Upgrades**

[Insert]

**B. Network Upgrades**

[Insert]

(1) Stand Alone Network Upgrades

(2) Other Network Upgrades

**C. Affected System Upgrades**

[Insert]

**D. Contingency Upgrades**

(1) Long Lead Facility-Related Upgrades. The Interconnection Customer's Small Generating Facility is associated with a Long Lead Facility, in accordance with Section 3.2.3 of the LGIP. Pursuant to Section 4.1 of the LGIP, the Interconnection Customer shall be responsible for the following upgrades in the event that the Long Lead Facility

achieves Commercial Operation and obtains a Capacity Supply Obligation in accordance with Section III.13.1 of the Tariff:

*[insert list of upgrades]*

If the Interconnection Customer fails to cause these upgrades to be in-service prior to the commencement of the Long Lead Facility's Capacity Commitment Period, the Interconnection Customer shall be deemed to be in Breach of this SGIA in accordance with Article 7, and the System Operator will initiate all necessary steps to terminate this SGIA, in accordance with Article 3.

(2) Other Contingency Upgrades. [*e.g., list of upgrades associated with higher queued Interconnection Requests with SGIAs prior to this SGIA and any other contingency upgrades that the Parties may deem necessary for the interconnection of the Small Generating Facility.*]

E. Post-Forward Capacity Auction Re-study Upgrade Obligations.

*[Insert any changes in upgrade obligations that result from re-study conducted post receiving a Capacity Supply Obligation in accordance with the Tariff.]*

**Commercial Operation Date**

This Attachment 7 is a part of the SGIA between System Operator, Interconnecting Transmission Owner and Interconnection Customer.

[Date]

[Interconnecting Transmission Owner; Address]

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Re: \_\_\_\_\_ Small Generating Facility

Dear \_\_\_\_\_:

On [Date] [Interconnection Customer] has completed Trial Operation of Unit No. \_\_\_\_.  
This letter confirms that [Interconnection Customer] commenced commercial operation  
of Unit No. \_\_\_\_ at the Small Generating Facility, effective as of [Date plus one day].

Thank you.

[Signature]

[Interconnection Customer Representative]

|

## **SCHEDULE 25**

### **ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION PROCEDURES**

## **TABLE OF CONTENTS**

SECTION 1.	DEFINITIONS
SECTION 2.	SCOPE, APPLICATION AND TIME REQUIREMENTS
2.1	Application of Elective Transmission Upgrade Interconnection Procedures
2.2	Comparability
2.3	Base Case Data
2.4	No Applicability to Transmission Service
2.5	Treatment of Elective Transmission Upgrades for Transmission, Operations, and Scheduling Purposes
2.6	Time Requirements
SECTION 3.	INTERCONNECTION REQUESTS
3.1	General
3.2	Type of Interconnection Services and Long Lead Time Facility Treatment
3.3	Valid Interconnection Request
3.4	OASIS Posting
3.5	Coordination with Affected Systems
3.6	Withdrawal
SECTION 4.	QUEUE POSITION
4.1	General
4.2	Reserved
4.3	Transferability of Queue Position
4.4	Modifications
SECTION 5.	PROCEDURES FOR TRANSITION
5.1	Queue Position for Pending Requests
5.2	Reserved
5.3	New System Operator or Interconnecting Transmission Owner
SECTION 6.	INTERCONNECTION FEASIBILITY STUDY
6.1	Interconnection Feasibility Study Agreement
6.2	Scope of Interconnection Feasibility Study
6.3	Interconnection Feasibility Study Procedures
6.4	Re-Study
SECTION 7.	INTERCONNECTION SYSTEM IMPACT STUDY

7.1	Interconnection System Impact Study Agreement
7.2	Execution of Interconnection System Impact Study Agreement
7.3	Scope of Interconnection System Impact Study
7.4	Interconnection System Impact Study Procedures
7.5	Meeting with Parties
7.6	Re-Study
7.7	Operational Readiness
SECTION 8.	INTERCONNECTION FACILITIES STUDY
8.1	Interconnection Facilities Study Agreement
8.2	Scope of Interconnection Facilities Study
8.3	Interconnection Facilities Study Procedures
8.4	Meeting with Parties
8.5	Re-Study
SECTION 9.	ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT
SECTION 10.	OPTIONAL INTERCONNECTION STUDY
10.1	Optional Interconnection Study Agreement
10.2	Scope of Optional Interconnection Study
10.3	Optional Interconnection Study Procedures
10.4	Meeting with Parties
10.5	Interconnection Agreement Developed Based on Optional Interconnection Study
SECTION 11.	ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT (ETU IA)
11.1	Tender
11.2	Negotiation
11.3	Evidence to be Provided by Interconnection Customer; Execution and Filing of ETU IA
11.4	Commencement of Interconnection Activities
11.5	Other Regulatory Arrangements
SECTION 12.	CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES
12.1	Schedule
12.2	Construction Sequencing
SECTION 13.	MISCELLANEOUS
13.1	Confidentiality

- 13.2 Delegation of Responsibility
- 13.3 Obligation for Study Costs
- 13.4 Third Parties Conducting Studies
- 13.5 Disputes
- 13.6 Local Furnishing Bonds



## **APPENDICES TO ETU INTERCONNECTION PROCEDURES**

APPENDIX 1 INTERCONNECTION REQUEST

APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT

APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT

APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT

APPENDIX 6 ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT

## **SECTION I. DEFINITIONS.**

The definitions contained in this section are intended to apply in the context of the Elective Transmission Upgrade interconnection process provided for in this Schedule 25 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of Elective Transmission Upgrade interconnections under this Schedule 25. Capitalized terms in Schedule 25 that are not defined in this Section I shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF and; the Non-PTF, ~~and distribution facilities that are subject to the Tariff.~~

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**Base Case** shall have the meaning specified in Section 2.3.

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability databases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Elective Transmission Upgrade Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Elective Transmission Upgrade Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resource or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Import Capability (“CNI Capability”)** shall mean the MW quantity associated with CNI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Import Interconnection Service (“CNI Interconnection Service”)** shall mean, for an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s Capacity Network Import Interconnection Service shall be for the megawatt of Capacity Network Import Capability. Capacity Network Import Interconnection Service does not in and of itself convey transmission service.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of an ETU Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of an Elective Transmission Upgrade that has commenced transmitting electricity, excluding performance during Trial Operation.

**Commercial Operation Date** shall mean the date on which the Elective Transmission Upgrade commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Elective Transmission Upgrade Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise. Confidential Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Elective Transmission Upgrade Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby

generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Elective Transmission Upgrade. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Elective Transmission Upgrade Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Elective Transmission Upgrade ("ETU")** shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.

**Elective Transmission Upgrade Interconnection Agreement ("ETU IA")** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade, that is included in this Schedule 25 to Section II of the Tariff.

**Elective Transmission Upgrade Interconnection Procedures ("ETU IP")** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade that are included in this Schedule 25 to Section II of the Tariff.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the

security of, or damage to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Elective Transmission Upgrade or Interconnection Customer's Interconnection Facilities.

**Engineering & Procurement ("E&P") Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**External Elective Transmission Upgrade ("External ETU")** shall mean an Elective Transmission Upgrade that interconnects the New England Control Area with another Control Area.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of Section II to the Tariff.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such

term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities.

**Interconnecting Transmission Owner** shall mean Transmission Owner that owns, leases or otherwise possesses an interest in the portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Elective Transmission Upgrade Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator, and may refer to one or more Transmission Owners in the case of an Internal Elective Transmission Upgrade.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Elective Transmission Upgrade with the Administered Transmission System under the Elective Transmission Upgrade Interconnection Procedures.



**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Elective Transmission Upgrade Interconnection Agreement, that are separate and distinct from the Elective Transmission Upgrade and are located between the Elective Transmission Upgrade and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Elective Transmission Upgrade and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Elective Transmission Upgrade with the Administered Transmission System. The scope of the study is defined in Section 8 of the Elective Transmission Upgrade Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Elective Transmission Upgrade to the Administered Transmission System, the scope of which is described in Section 6 of the Elective Transmission Upgrade Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the

Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Elective Transmission Upgrade Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Elective Transmission Upgrade to the Administered Transmission System; (ii) make a Material Modification to an Elective Transmission Upgrade with an outstanding Interconnection Request; (iii) increase the capability of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System; (iv) make a Material Modification to the design or operating characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected with the Administered Transmission System; or (v) change from NI Interconnection Service to CNI Interconnection Service for an Elective Transmission Upgrade that is eligible to request such services. Interconnection Request shall not include a request to interconnect to a transmission facility that is not part of the Administered Transmission System.

**Interconnection Service** shall mean the right to interconnect the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System at the Point of Interconnection pursuant to the terms of the Elective Transmission Upgrade Interconnection Agreement and, if applicable, the Tariff. For an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, Interconnection Service shall include Capacity Network Import Interconnection Service or Network Import Interconnection Service.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional Interconnection Study described in the Elective Transmission Upgrade Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to Elective Transmission Upgrade Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection of an Elective Transmission Upgrade on the safety and reliability of the Administered Transmission System and any other Affected System. The study shall identify and detail the system impacts that would result if the Elective Transmission Upgrade were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Elective Transmission Upgrade Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection System Impact Study.

**Internal Elective Transmission Upgrade (“Internal ETU”)** shall mean an Elective Transmission Upgrade that interconnects solely within the New England Control Area.

**IRS** shall mean the Internal Revenue Service.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff, respectively,

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party’s performance, or non-performance of its obligations under the Elective Transmission Upgrade Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2.2(a) of the Tariff.

**Material Modification** shall mean: (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer, that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Trial Operation Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer’s control; (iv) except as provided in Section 3.2.3.4, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed pursuant to the Elective Transmission Upgrade Interconnection Agreement, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard (“NC Interconnection Standard”)** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Import Capability (“NI Capability”)** shall mean the MW quantity associated with NI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Import Interconnection Service (“NI Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s Network Import Interconnection Service shall be solely for the megawatt amount of the Network Import Capability. Network Import Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Elective Transmission Upgrade to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Elective Transmission Upgrade Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities connect to the Interconnecting Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point(s), as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a "higher-queued" Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as "lower-queued."

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Elective Transmission Upgrade Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed

appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property where the Elective Transmission Upgrade's terminal locations will be located at the Point of Interconnection within the New England Control Area.

**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Elective Transmission Upgrade Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this ETU IP.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or

other electrical disturbances occurring at the Elective Transmission Upgrade and (2) the Elective Transmission Upgrade from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Elective Transmission Upgrade prior to Commercial Operation.

**Trial Operation Date** shall mean the date upon which the Elective Transmission Upgrade begins Trial Operation.

## **SECTION 2. SCOPE, APPLICATION AND TIME REQUIREMENTS.**

### **2.1 Application of Elective Transmission Upgrade Interconnection Procedures.**

The ETU IP and ETU IA shall apply to Interconnection Requests pertaining to Elective Transmission Upgrades. Except as expressly provided in the ETU IP and ETU IA, nothing in the ETU IP or ETU IA shall be construed to limit the authority or obligations that the Interconnecting Transmission Owner or System Operator, as applicable, has with regard to ISO New England Operating Documents.

### **2.2. Comparability.**

The System Operator shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this ETU IP. The System Operator and Interconnecting Transmission Owner will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the ETU is owned by the Interconnecting Transmission Owner, its subsidiaries or Affiliates, or others.

### **2.3 Base Case Data.**

System Operator, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall provide Base Case power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists upon request to the Interconnection Customer and any third party consultant retained by the Interconnection Customer. For the purpose of this provision, Base Case Data may include the electromagnetic transient network model that does not include proprietary



electromagnetic transient equipment models. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy as well as any other applicable requirement under Applicable Laws and Regulations regulating disclosure or confidentiality of such information. System Operator is permitted to require that the Interconnection Customer or third party consultant sign a confidentiality agreement before the release of information governed by Section 13.1 or the ISO New England Information Policy, or the release of any other information that is commercially sensitive or Critical Energy Infrastructure Information. Such databases and lists, hereinafter referred to as Base Cases, shall include all generation and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. The Base Cases shall also include generation projects that are not participating in the System Operator's interconnection process, but are expected to achieve approval pursuant to Section I.3.9 of the Tariff within 90 days from the date of the creation of the Base Cases and for which steady state, short circuit and stability models for the generation projects and any associated system upgrades have been provided to the System Operator. The Interconnection Customer, where applicable, shall provide Base Case Data to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

## **2.4 No Applicability to Transmission Service.**

Nothing in this ETU IP shall constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

## **2.5 Treatment of Elective Transmission Upgrades for Transmission, Operations, and Scheduling Purposes.**

All ETUs must be categorized as PTF, Non-PTF, MTF or OTF. External ETUs will be treated for transmission, operations and scheduling purposes by the System Operator in a manner consistent with similarly situated PTF, Non-PTF, MTF or OTF under the Tariff. Internal ETUs will be operated and scheduled by the System Operator without recognition of physical transmission rights.

## **2.6 Time Requirements.**

Parties that must perform a specific obligation under a provision of the ETU IP or ETU IA within a specified time period shall use Reasonable Efforts to complete such obligation within the applicable time period. A Party may, in the exercise of reasonable discretion and within the time period set forth by the applicable procedure or agreement, request that the relevant Party consent to a mutually agreeable alternative time schedule, such consent not to be unreasonably withheld.

### **SECTION 3. INTERCONNECTION REQUESTS.**

#### **3.1 General.**

To initiate an Interconnection Request, an Interconnection Customer must comply with all of the requirements set forth in Section 3.3.1. The Interconnection Customer shall submit a separate Interconnection Request(s) for each Elective Transmission Upgrade of a: (a) specific technology to be interconnected at a designated Point of Interconnection for a specific capability; or (b) specific objective to facilitate the operation of specific Generating Facility(ies), including achieving CNR Interconnection Service, to increase transfer capability between two specific endpoints, or another specific and clearly defined discrete objective that the ISO, at its sole discretion, determines that it is appropriate to propose in a single Interconnection Request. The Interconnection Customer must comply with the requirements specified in Section 3.3.1 for each Interconnection Request even when more than one request is submitted.

Within three (3) Business Days after its receipt of a valid Interconnection Request, System Operator shall submit a copy of the Interconnection Request to Interconnecting Transmission Owner.

At Interconnection Customer's option, System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the Interconnection Feasibility Study Agreement, or the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

All deposits that must be submitted to the System Operator under this ETU IP, must be delivered to the System Operator's bank account by electronic transfer within the period specified in the respective provision. A deposit will not be considered received until it is in the System Operator's bank account.

### **3.2 Type of Interconnection Services and Long Lead Time Facility Treatment.**

Interconnection Service for all Elective Transmission Upgrades is the right to interconnect the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System at the Point of Interconnection pursuant to the terms of the Elective Transmission Upgrade Interconnection Agreement and, if applicable, the Tariff. For an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility, Interconnection Service shall include CNI Interconnection Service or NI Interconnection Service. An External ETU Merchant Transmission Facility or Other Transmission Facility is a controllable facility if it employs technology that, in the judgment of the System Operator, enables full control over the direction and amount of power flow on the Elective Transmission Upgrade without adjusting the dispatch of resources within or outside of the New England Control Area, and can be scheduled, curtailed and operated independently from any other interface that interconnects the New England Control Area with another Control Area.

An External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility seeking to import capacity and/or energy into the New England Control Area must select either CNI Interconnection Service or NI Interconnection Service at the time the Interconnection Request is submitted, as described in Sections 3.2.1 and 3.2.2 below. An Interconnection Customer that meets the requirements to obtain CNI Interconnection Service shall obtain NI Interconnection Service up to the NI Capability upon completion of all requirements for NI Interconnection Service, including all necessary upgrades. Upon completion of all requirements for the CNI Interconnection Service, the Interconnection Customer shall also receive CNI Interconnection Service for CNI Capability. An Interconnection Customer that meets the requirements to obtain NI Interconnection Service shall receive NI Interconnection Service for the Interconnection Customer's NI Capability. At the time the Interconnection Request is submitted, the Interconnection Customer may also request Long Lead Facility treatment in accordance with Section 3.2.3.

Interconnection Studies for Elective Transmission Upgrades shall assure that the Interconnection Customer's Elective Transmission Upgrade interconnects to the Administered Transmission System consistent with the objectives specified in the ETU Interconnection Request and in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Elective Transmission Upgrade.

### **3.2.1 Capacity Network Import Interconnection Service.**

#### **3.2.1.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility under the CC Interconnection Standard. CNI Interconnection Service allows the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility to enable the participation of an Import Capacity Resource in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the CNI Capability or as otherwise provided in the Tariff.

#### **3.2.1.2 The Studies.**

All Interconnection Studies for CNI Interconnection Service shall assure that the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the facility. The CNR Group Study for CNI Interconnection Service shall assure that the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility can be interconnected in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources and Elective Transmission Upgrades with CNI Interconnection Service, in accordance with the CC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load

conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

#### **3.2.1.3 Milestones for Capacity Network Import Interconnection Service.**

In addition to the requirements set forth in this ETU IP, an Interconnection Customer with an Interconnection Request for CNI Interconnection Service or its counterparty (i.e., Import Capacity Resource) as required shall complete the following milestones prior to receiving CNI Interconnection Service for the CNI Capability, such milestones to be specified in Appendix B of the ETU IA, as either completed or to be completed: (i) submit the necessary requests for participation in the Forward Capacity Auction associated with the Elective Transmission Upgrade's Commercial Operation Date (except as modified pursuant to Sections 3.2.3 or 4.4 of the ETU IP) in accordance with the provisions of Section III.13 of the Tariff; (ii) participate in a CNR Group Study for the Forward Capacity Auction associated with the requested Elective Transmission Upgrade's Commercial Operation Date; (iii) qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff; and (iv) complete a re-study of the applicable Interconnection Study and CNR Group Study after the Forward Capacity Auction, Reconfiguration Auction, or bilateral transaction through which the Interconnection Customer's counterparty received a Capacity Supply Obligation to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request. The re-study shall include those CNR Interconnection Service and CNI Interconnection Service Interconnection Requests with a higher Queue Position that cleared and shall exclude any upgrades that are no longer necessary as a result of existing capacity that will be retired as of the start of the Capacity Commitment Period for which the resource of the Interconnection Customer's counterparty received a Capacity Supply Obligation. With respect to (iv) above, if an Interconnection Study Agreement has been executed, the Interconnection Study associated with the Interconnection Study Agreement shall include the necessary analysis that would otherwise have been performed in a re-study. If the original Interconnection Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Study Agreement. If an ETU IA has been either executed or filed with the Commission in unexecuted form, then the last Interconnection Study completed for the Interconnection Customer under this ETU IP shall be subject to re-study. The Appendices to the ETU IA shall be amended (pursuant to Article 30 of the ETU IA) to reflect CNI Capability and the results of the re-study.

#### **3.2.2 Network Import Interconnection Service.**

#### **3.2.2.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect a controllable Merchant Transmission Facility or Other Transmission Facility External ETU under the NC Interconnection Standard. Notwithstanding the above, the portion of a controllable Merchant Transmission Facility or Other Transmission Facility External ETU that has been interconnected under the NC Interconnection Standard cannot be used to support an Import Capacity Resource's participation in the Forward Capacity Market under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNI Interconnection Service.

#### **3.2.2.2 The Studies.**

The Interconnection Studies for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall assure that the Interconnection Customer's External ETU satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the unit, in accordance with the NC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

#### **3.2.2.3 Milestones for Network Import Interconnection Service.**

An Interconnection Customer with an Interconnection Request for NI Interconnection Service shall complete the requirements in this ETU IP prior to receiving NI Interconnection Service.

### **3.2.3 Long Lead Time Facility Treatment.**

#### **3.2.3.1 Treatment of Long Lead Facility.**

Long Lead Facilities receive the treatment described herein in connection with the associated request of the Interconnection Customer for CNR Interconnection Service for its Large Generating Facility or CNI Interconnection Service for its External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility. Long Lead Facility treatment provides for the Interconnection Customer's Generating Facility or controllable Merchant Transmission Facility or Other Transmission Facility External ETU, after the completion of the Interconnection System Impact Study, to be modeled in the Base Cases for the next CNR Group Study to determine whether the Long Lead Facility would have qualified or enabled the qualification of an Import Capacity Resource to participate in the Forward Capacity Auction associated with that CNR Group Study, in accordance with Section III.13.1.2 of the Tariff, but for the Long Lead Facility's development cycle (which shall include development of required transmission upgrades). If the Long Lead Facility is deemed to qualify or have enabled an associated Import Capacity Resource to qualify, the Long Lead Facility shall be included in the re-study pursuant to Section 3.2.1.3(iv) in order to determine the facilities and upgrades that would be necessary in order to accommodate the Interconnection Request of the Long Lead Facility, and for which costs the Interconnection Customer must be responsible. In order to maintain Long Lead Facility status, the Interconnection Customer must commit to the completion of these facilities and upgrades in time to allow the Long Lead Facility to achieve its Commercial Operation Date by the start of the associated Capacity Commitment Period. In addition, the Long Lead Facility will be treated as a New Generating Capacity Resource in the case of a Generating Facility or as if an Import Capacity Resource associated with the Long Lead Facility cleared in the case of an External ETU for the sole purpose of inclusion of the Long Lead Facility in the CNR Group Studies for the Forward Capacity Auctions that precede the Forward Capacity Auction for the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation. If an earlier-queued Generating Facility seeking CNR Interconnection Service or an Import Capacity Resource associated with an Elective Transmission Upgrade that is seeking CNI Interconnection Service obtains a Capacity Supply Obligation in a Forward Capacity Auction prior to or simultaneous with the Forward Capacity Auction in which the Long Lead Facility or its contractual counterparty in the case of an Elective Transmission Upgrade obtains a Capacity Supply Obligation, the Long Lead Facility will be re-studied in order to determine whether any additional facilities and upgrades to those identified prior to the CNR Group Study must be completed, at the Interconnection Customer's cost, prior to its Commercial Operation Date. A Long Lead Facility's cost responsibility for the facilities necessary to accommodate the Interconnection Request shall not be impacted by a Generating Facility or an External ETU with a Queue Position lower than the Long Lead

Facility or its counterparty in the case of an External ETU that clears in a Forward Capacity Auction, in accordance with Section III.13.2 of the Tariff, prior to the clearance of the Long Lead Facility.

### **3.2.3.2 Request for Long Lead Facility Treatment.**

An Interconnection Customer requesting CNR Interconnection Service for its proposed Generating Facility or CNI Interconnection Service for its proposed controllable Merchant Transmission Facility or Other Transmission Facility External ETU, which the Interconnection Customer projects to have a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) may elect or request Long Lead Facility treatment in the following manner:

(a) An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service of 100 MW or more may elect Long Lead Facility treatment at the time the Interconnection Request is submitted, together with the critical path schedule and deposits required in Section 3.2.3.3.

(b) An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service under 100 MW at may request Long Lead Facility treatment by submitting a written request to the System Operator for its review and approval, explaining why the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU cannot achieve Commercial Operation by the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for Long Lead Facility treatment is made), together with the critical path schedule and deposits required in Section 3.2.3.3. In reviewing the request, the System Operator shall evaluate the feasibility of the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU achieving Commercial Operation to meet an earlier Capacity Commitment Period based on the information provided in the request and the critical path schedule submitted pursuant to Section 3.2.3.3, in a manner similar to that performed under Section III.13.3.2 of the Tariff. Within forty-five (45) Business Days after its receipt of the request for Long Lead Facility treatment, the System Operator shall notify the Interconnection Customer in writing whether the request has been granted or denied. If



the System Operator determines that the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU can achieve a Commercial Operation Date prior to the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction, the Interconnection Customer's request shall be denied. The dispute resolution provisions of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU are not available for disputes or claims associated with the ISO's determination to deny an Interconnection Customer's request for Long Lead Facility treatment.

(c) An Interconnection Customer that did not request Long Lead Facility treatment at the time the Interconnection Request was submitted, may thereafter submit a request for treatment as a Long Lead Facility, together with the critical path schedule and deposits required in Section 3.2.3.3 and, if applicable, a request for an extension of the Commercial Operation Date specified in the Interconnection Request in accordance with Sections 4.4.4 and 4.4.5. A request for Long Lead Facility treatment that is submitted after the initial Interconnection Request will not be eligible to participate in any Forward Capacity Auction prior to the Forward Capacity Auction associated with the extended Commercial Operation Date. The Long Lead Facility will be modeled in the Base Cases for the CNR Study Group associated with the near term Forward Capacity Auction unless that CNR Study Group is underway, in which case the Long Lead Facility will be modeled in the next CNR Study Group.

### **3.2.3.3 Critical Path Schedule and Deposits for Long Lead Facility Treatment.**

At the time an Interconnection Customer submits an election or request for Long Lead Facility treatment, the Interconnection Customer must submit, together with the request:

**(1) Critical Path Schedule.** A critical path schedule, in writing, for the Long Lead Facility (with a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) that meets the requirements set forth in Section III.13.1.1.2.2.2 of the Tariff. The Interconnection Customer must submit annually, in writing, an updated critical path schedule to the System Operator by the closing deadline of each New Capacity Show of Interest Submission Window that precedes the Forward Capacity Auction associated with the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation, prior to the inclusion of the Long Lead Facility in the Base Case for the

CNR Group Study associated with the corresponding New Capacity Show of Interest Submission Window. With its annual update, for each critical path schedule milestone achieved since the submission of the previous critical path schedule update, the Interconnection Customer must include in the critical path update documentation demonstrating that the milestone has been achieved by the date indicated and as otherwise described in the critical path schedule.

## **(2) Long Lead Facility Deposits.**

**(a) Deposits.** In addition to the deposits required elsewhere in the LGIP in the case of a Generating Facility or the ETUP IP for External ETU, at the time of its request for Long Lead Facility treatment, in accordance with Section 3.2.3.3, and by each deadline for which a New Generating Capacity Resource is required to provide financial assurance under Section III.13.1.9.1 of the Tariff, the Interconnection Customer must provide a separate deposit in the amount of  $0.25 * (\text{Forward Capacity Auction Starting Price } (\$/\text{kW-mo}) / 2) * \text{requested CNR Capability or CNI Capability}$ . For each calculation of the deposit, the System Operator shall use the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction at the time of that calculation, pursuant to Section III.13.2.4 of the Tariff, or the Forward Capacity Auction Starting Price for the previous Forward Capacity Auction in the case where the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction has not yet been calculated. The total amount of deposits shall not exceed the Non-Commercial Capacity Financial Assurance Amount that the Long Lead Facility would be required to provide if the Long Lead Facility or its counterparty cleared in the upcoming Forward Capacity Auction, in accordance with Section III.13.1.9.1 of the Tariff. The Long Lead Facility deposits will be fully refunded (with interest to be calculated in accordance with Section 3.6) (i) if the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within thirty (30) Calendar Days of the Scoping Meeting or of the completion of the System Impact Study (including restudy of the System Impact Study), pursuant to Section 7, or (ii) once the Long Lead Facility or its counterparty clears in a Forward Capacity Auction.

**(b) Reductions.** Ten (10) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) after the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear in the Forward Capacity Auction

that follows the first Forward Capacity Auction for which the Long Lead Facility or its counterparty could qualify based on the Commercial Operation Date specified in the initial critical path schedule for the Long Lead Facility. An additional five (5) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) following each subsequent Forward Capacity Auction in which the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear such Forward Capacity Auction, not to exceed the maximum period allowed under Sections 3.3.1, 4.4.4 and 4.4.5. The non-refundable portions of the deposits shall be credited to the revenue requirements under Schedule 1 of Section IV of the Tariff.

#### **3.2.3.4 Withdrawal and Refunds After Expenditures for Upgrades.**

An Interconnection Customer that provides documentation in the critical path schedule update to be submitted in accordance with Section 3.2.3.3(1), showing expenditures of the required amounts for upgrades identified in the Interconnection Studies for the Long Lead Facility, may submit a withdrawal of the Interconnection Request for the Long Lead Facility, in accordance with Section 3.6, at any time up to thirty (30) Calendar Days, after the Long Lead Facility's or its counterparty's failure to clear in any Forward Capacity Auction. In such instance, the Interconnection Customer shall receive a refund from the System Operator of the Long Lead Facility deposits (with interest to be calculated in accordance with Section 3.6) as adjusted pursuant to 3.2.3.3(2), if appropriate, and from the Interconnecting Transmission Owner a refund of the payments for the upgrades that exceed the costs incurred by the Interconnecting Transmission Owner. If the Interconnection Customer withdraws only its election or request for Long Lead Facility treatment, such withdrawal will be considered a Material Modification and the Long Lead Facility will lose its Queue Position unless its withdrawal occurs within one of the thirty (30)-day periods described in Section 3.2.3.3(2) of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU.

#### **3.2.3.5 Additional Requirements to Maintain Long Lead Facility Treatment.**

An Interconnection Customer with a Long Lead Facility must begin payment as required by the transmission expenditure schedule for the transmission upgrade costs that have been identified in the pertinent Interconnection Studies. The Interconnection Request for CNI Interconnection Service shall be deemed withdrawn under Section 3.6 if the Interconnection Customer fails to comply with the requirements for Long Lead Facility treatment, including the milestones specified in Section 3.2.1.4. In

this circumstance, the conditions specified in an Interconnection Agreement for a Generating Facility seeking CNR Interconnection Service or External ETU seeking CNI Interconnection Service that had an Interconnection Request of a Queue Position lower than the Long Lead Facility, but cleared (in the case of the Elective Transmission Upgrade, the Import Capacity Resource) in a Forward Capacity Auction prior to the Long Lead Facility, shall be removed.

#### **3.2.3.6 Participation in Earlier Forward Capacity Auctions.**

An Interconnection Customer with a Long Lead Facility may, without loss of Queue Position, elect to participate in an earlier Forward Capacity Auction than originally anticipated, but only if the election to accelerate is made to the System Operator in writing within thirty (30) Calendar Days of the Scoping Meeting or within thirty (30) Calendar Days of the completion of the System Impact Study (but before the Long Lead Facility and the results of the associated System Impact Study are incorporated into the Base Cases). Otherwise, such an election shall be considered a Material Modification.

### **3.3 Valid Interconnection Request.**

#### **3.3.1 Initiating an Interconnection Request.**

To initiate and establish a valid Interconnection Request, Interconnection Customer must submit all of the following to the System Operator in the manner specified in Appendix 1 Interconnection Request to this ETU IP: (i) an initial deposit of \$50,000, (ii) a completed application in the form of Appendix 1, (iii) all information and deposits required under Section 3.2, and (iv) demonstration of Site Control or a posting of an additional deposit of \$10,000 in lieu of Site Control for all Interconnection Request except those requesting CNI Interconnection Service, in which case Site Control is required. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for (i) a modification to the Interconnection Customer's existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property, or (ii) a modification to existing Pool Transmission Facility that is not owned by the Interconnection Customer. The portions of the deposit of \$50,000 that have not been applied as provided in this Section 3.3.1 shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry

Deadline, (iii) the Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in relative order with any other Interconnection Request also requesting to be re-queued pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit of \$50,000 (and any study-related deposits, if any have been submitted) shall be applied toward the re-queued Interconnection Request's initial deposit of \$50,000 and any remaining balance will be refunded, or (iv) if the Interconnection Customer executes an ETU IA. Otherwise, any unused balance of the deposit of \$50,000 shall be non-refundable and applied on a pro-rata basis to offset costs incurred by Interconnection Customers with lower Queue Positions that are subject to re-study, as determined by the System Operator in accordance with the provisions of this ETU IP, as a result of the withdrawal of an Interconnection Request with a higher Queue Position.

The deposit of \$50,000 shall be applied toward the costs incurred by the System Operator associated with the Interconnection Request and Long Lead Facility treatment, as well as, the costs of the Interconnection Feasibility Study and/or the Interconnection System Impact Study, including the cost of developing the study agreements and their attachments, and the cost of developing the ETU IA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit of \$50,000 also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS.

If, in the case of a request that is not for CNI Interconnection Service, the Interconnection Customer demonstrates Site Control within the cure period specified in Section 3.3.3 after submitting its Interconnection Request, the additional deposit of \$10,000 shall be refundable; otherwise, that deposit shall be applied as provided in Section 3.1, including, toward the costs of any Interconnection Studies pursuant to the Interconnection Request, the cost of developing the study agreement(s) and associated attachment(s), and the cost of developing the ETU IA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. The portions of the deposit of \$10,000 that have not been applied as provided in this Section 3.3.1 also shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry Deadline, (iii) the

Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit shall be applied toward the re-queued Interconnection Request in lieu of Site Control for NR Interconnection Service, or (iv) if the Interconnection Customer executes an ETU IA.

The expected Trial Operation Date of the new Elective Transmission Upgrade, or the increase in capability of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility interconnected to the Administered Transmission System, or of the implementation of a Material Modification to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System shall not exceed seven (7) years from the date the Interconnection Request is received by the System Operator, unless the Interconnection Customer demonstrates that such time required to actively engineer, permit and construct the new Elective Transmission Upgrade or increase in capability of the existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility interconnected to the Administered Transmission System or implement the Material Modification to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System will take longer than the seven year period. Upon such demonstration, the Trial Operation Date may succeed the date the Interconnection Request is received by the System Operator by a period of greater than seven (7) years so long as the Interconnection Customer, System Operator, and Interconnecting Transmission Owner agree; such agreement shall not be unreasonably withheld.

Within sixty (60) days of submitting an Interconnection Request to the System Operator, the Interconnection Customer with a request for an External ETU, shall provide evidence that it has submitted a valid request with the other Control Area to which it seeks to interconnect. Notwithstanding any other provision in this ETU IP, if such evidence is not provided within a period not to exceed sixty (60) days, the Interconnection Request will immediately be deemed withdrawn.

### **3.3.2 Acknowledgment of Interconnection Request.**

System Operator shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgement. With the System Operator's acknowledgement of a valid Interconnection Request, the System Operator shall provide to the Interconnection Customer an Interconnection Feasibility Study

Agreement in the form of Appendix 2 or an Interconnection System Impact Study Agreement in the form of Appendix 3.

### **3.3.3 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid Interconnection Request until all items in Section 3.3.1 have been received by the System Operator. If an Interconnection Request fails to meet the requirements set forth in Section 3.3.1, the System Operator shall notify the Interconnection Customer within five (5) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide the System Operator the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Section 3.3.3 shall be treated in accordance with Section 3.6.

### **3.3.4 Scoping Meeting.**

Within ten (10) Business Days after receipt of a valid Interconnection Request, System Operator shall establish a date agreeable to Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, for a Scoping Meeting, and such date shall be no later than thirty (30) Calendar Days from receipt of the valid Interconnection Request, unless otherwise mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be (i) to discuss the estimated timeline for completing all applicable Interconnection Studies, and alternative interconnection options, (ii) to exchange pertinent information including any transmission data that would reasonably be expected to impact such interconnection options, (iii) to analyze such information, (iv) to determine the potential feasible Points of Interconnection, and (v) to discuss any other information necessary to facilitate the administration of the Interconnection Procedures. If a PSCAD model is required, the Parties shall discuss this at the Scoping Meeting. If the Interconnection Customer provided the technical data called for in Appendix 1, Attachment A with the Interconnection Request, the Parties shall discuss the detailed project design at the Scoping Meeting.

The Parties will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) information regarding general short circuit issues, (iv) general

voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. The Parties will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 6.1, and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

Unless the Interconnection Request has been identified to be included in a CRPS or eligible for inclusion in a CSIS, within five (5) Business Days following the Scoping Meeting Interconnection Customer shall notify the System Operator, in writing, (i) whether it wants the Interconnection Feasibility Study to be completed as a separate and distinct study or as part of the Interconnection System Impact Study; (ii) if requesting the Interconnection Feasibility Study be completed as a separate and distinct study, which of the alternative study scopes is being selected pursuant to Section 6.2; and (iii) the Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection for inclusion in the attachment to the Interconnection Feasibility Study Agreement, or the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

### **3.4 OASIS Posting.**

The System Operator will maintain on its OASIS a list of all Interconnection Requests in its Control Area. The list will identify, for each Interconnection Request: (i) the maximum net summer and winter megawatt electrical output; (ii) the location by county and state of the Point of Interconnection; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected Trial Operation Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of Interconnection Service being requested (i.e., CNI Interconnection Service or NI Interconnection Service); and (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Elective Transmission Upgrade to be constructed (e.g., Internal ETU, External ETU, controllable, non-controllable); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an ETU IA or requests that the System Operator and Interconnecting Transmission Owner jointly file an unexecuted ETU IA with the Commission. Before participating in a Scoping Meeting with an Interconnection Customer that is also an Affiliate, the Interconnecting Transmission Owner shall post on OASIS an advance notice of its intent to do so. The System Operator



shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Study reports shall be posted to the System Operator's OASIS site subsequent to the meeting between the System Operator, Interconnecting Transmission Owner, and Interconnection Customer to discuss the applicable study results. The System Operator shall also post any known deviations in the Elective Transmission Upgrade's Trial Operation Date.

### **3.5 Coordination with Affected Systems.**

The System Operator will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected Parties and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this ETU IP. The System Operator will include such Affected Parties in all meetings held with the Interconnection Customer as required by this ETU IP. The Interconnection Customer will cooperate with the System Operator and Interconnecting Transmission Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. The Interconnection Customer shall be responsible for the costs associated with the studies or portions of studies associated with the Affected Systems. Payment and refunds associated with the costs of such studies will be coordinated between the Interconnection Customer and the Affected Party(ies).

The System Operator shall seek the cooperation of all Affected Parties in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Nothing in the foregoing is intended to authorize the Interconnection Customer to receive interconnection, related facilities or other services on an Affected System, and provision of such services must be handled through separate arrangements with Affected Party(ies).

### **3.6 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to System Operator, which System Operator will transmit to Interconnecting Transmission Owner and any Affected Parties. In addition, if the Interconnection Customer fails to adhere to all requirements of this ETU IP, except as provided in Section 13.5 (Disputes), the System Operator shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Except as otherwise provided elsewhere in this ETU IP, the Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the

deficiency or to notify the System Operator of its intent to pursue Dispute Resolution, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, the System Operator may eliminate the Interconnection Customer's Interconnection Request from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to System Operator, Interconnecting Transmission Owner, and any Affected Parties all costs prudently incurred with respect to that Interconnection Request prior to System Operator's receipt of notice described above. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

The System Operator shall update the OASIS Queue Position posting. Except as otherwise provided elsewhere in this ETU IP, the System Operator and the Interconnecting Transmission Owner shall arrange to refund to the Interconnection Customer any portion of the Interconnection Customer's deposit or study payments that exceeds the costs incurred, including interest calculated in accordance with section 35.19a(a)(2) of the Commission's regulations, or arrange to charge to the Interconnection Customer any amount of such costs incurred that exceed the Interconnection Customer's deposit or study payments, including interest calculated in accordance with section 35.19a(a)(2) of the Commission's regulations. In the event of such withdrawal, System Operator, subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information, shall provide, at Interconnection Customer's request, all information developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## **SECTION 4. QUEUE POSITION.**

### **4.1 General.**

System Operator shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form in Appendix 1 to this ETU IP, and Interconnection Customer provides such information in accordance with Section 3.3.3, then System Operator shall assign

Interconnection Customer a Queue Position based on the date the application form was originally submitted.

Except as otherwise provided in this Section 4.1, the Queue Position of each Interconnection Request will be used to determine: (i) the order of performing the Interconnection Studies; (ii) the order in which Interconnection Requests will be eligible for inclusion in the CSIS and CFAC; (iii) the order in which Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service will be included in the CNR Group Study; and (iv) the cost responsibility for the facilities and upgrades necessary to accommodate the Interconnection Request. A higher queued Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued.

A CSIS and CFAC shall include the Interconnection Requests that were identified as eligible to participate in the CSIS and CFAC and met the associated requirements for inclusion in said studies in accordance with Section 4.2 of this ETU IP. An Interconnection Request included in a cluster shall consider a higher queued Interconnection Request not included in the cluster. A lower queued Interconnection Request that is not included in the cluster shall consider all of the higher queued Interconnection Requests that are part of the cluster.

#### **4.1.1 Order of Interconnection Requests in the CNR Group Study.**

Participation in a CNR Group Study shall be a prerequisite to achieve CNR Interconnection Service and CNI Interconnection Service. The CNR Group Study (to be conducted in accordance with Section III.13.1.1.2.3 of the Tariff) shall include all Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service that have an associated New Capacity Show of Interest Form that was submitted during the New Capacity Show of Interest Submission Window for the purpose of qualification for participation in the same Forward Capacity Auction for a Capacity Commitment Period, in accordance with Section III.13.1.1.2 of the Tariff, as well as Long Lead Facilities in accordance with Section 3.2.3. Where a CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a lower Queue Position is associated with a New Capacity Show of Interest Form that was submitted for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and another CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a higher Queue Position is not associated with a New Capacity Show of Interest Form that was submitted for qualification until a subsequent Forward Capacity Auction, the CNR Interconnection Service or CNI

Interconnection Service Interconnection Request with the lower Queue Position will be included in the CNR Group Study prior to the CNR Interconnection Service or the CNI Interconnection Service Interconnection Request with the higher Queue Position.

However, where an Interconnection Customer with a CNR Interconnection Service Interconnection Request submits a New Capacity Show of Interest Form for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and identifies in that New Capacity Show of Interest Form one or more Elective Transmission Upgrade Interconnection Request(s) for an Internal ETU that is not already included in the network model pursuant to Section III.12 of the Tariff for the particular Forward Capacity Auction, the CNR Interconnection Request will be included in the CNR Group Study at the lowest of the CNR Interconnection Request's or its associated Elective Transmission Upgrade Interconnection Request(s) for the Internal ETU's Queue Position. Where multiple Interconnection Customers' CNR Interconnection Service Interconnection Requests are associated with the same lower Queue Position for an Elective Transmission Upgrade Interconnection Request for an Internal ETU in the CNR Group Study, the CNR Interconnection Request's Queue Position will be used as the tie breaker to dictate the relative order in which the CNR Interconnection Service Interconnection Request will be included in the CNR Group Study.

An Interconnection Customer with a Generating Facility or that is associated with an Import Capacity Resource in the case of an Elective Transmission Upgrade that is treated as a Conditional Qualified New Resource, in accordance with Section III.13.1.1.2.3(f) of the Tariff, may be responsible for the facilities and upgrades associated with an overlapping CNR Interconnection Service or CNI Interconnection Service Interconnection Request having a higher Queue Position if the Conditional Qualified New Resource obtains a Capacity Supply Obligation through a Forward Capacity Auction under Section III.13.2.5 of the Tariff.

An Interconnection Customer with a lower queued CNR Interconnection Service Interconnection Request for a Generating Facility or CNI Interconnection Service Interconnection Request for an Elective Transmission Upgrade that has achieved Commercial Operation and obtained CNR Interconnection Service or CNI Interconnection Service, respectively, may be responsible for additional facilities and upgrades if the related higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively. In such circumstance, Appendix A

to the Interconnection Agreement for the lower queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request shall specify the facilities and upgrades for which the Interconnection Customer shall be responsible if the higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively.

Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates). Interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates that have not yet received the System Operator's approval for their Proposed Plan Applications under Section I.3.9 of the Tariff at the commencement of the CNR Group Study shall be included in the CNR Group Study after all Interconnection Requests submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and all interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff have been included in the CNR Group Study in order of submission to the Interconnecting Transmission Owners or their distribution company affiliates.

## **4.2 Clustering.**

Clustering Interconnection Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable Regional System Plan in light of the New England Transmission System's capabilities for the time period under study. The System Operator may study an Interconnection Request serially to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Elective Transmission Upgrade.

### **4.2.1 Triggers for Studying Interconnection Requests in Clusters.**

At the discretion of the System Operator, Interconnection Requests will be studied in clusters for the purpose of the Interconnection System Impact Study and the Interconnection Facilities Study when the combination of the following circumstances is present in the interconnection queue: (a) there are two (2) or more Interconnection Requests without completed Interconnection System Impact Studies in the same electrical part of the New England Control Area based on the requested Point of Interconnection, and (b) the System Operator determined that none of the Interconnection Requests identified in (a) of this Section 4.2.1 will be able to interconnect, either individually or on a cluster basis, without the use of common significant new transmission line infrastructure at or above 115 kV AC or HVDC. An Interconnection Request for an Internal ETU that the System Operator identifies as potentially eligible to take the place of a CETU will be eligible to participate in a CSIS.

#### **4.2.2 Notice of Initiation of Cluster Studies.**

When the combination of the triggers specified in Section 4.2.1 of this ETU IP are present in the interconnection queue, the System Operator will provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff. The System Operator also will provide notice to the Interconnection Customers with Interconnection Requests identified in Section 4.2.1 of this ETU IP, and at the time the System Operator notifies the Planning Advisory Committee of the initiation of a cluster, all study work for these Interconnection Requests will be suspended and they will proceed under Section 4.2 of this ETU IP. The System Operator will conduct Clustering in two phases. In the first phase, the System Operator will perform a CRPS to identify the CETU and associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests considered in Section 4.2.1 of this ETU IP, consistent with Section 15.2 of Attachment K. In the second phase, the System Operator will conduct a CSIS and a CFAC to study the Interconnection Requests identified through the CRPS that have elected to participate in the CSIS together with the identified CETU and associated upgrades, in accordance with this ETU IP.

Within sixty (60) Calendar Days of the System Operator's notice to the Planning Advisory Committee of the initiation of the use of Clustering for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff, Interconnection Customers with Interconnection Requests identified in Section 4.2.1 shall submit the technical data called for in Appendix 1, Attachment A, to support the conduct of the CRPS.

### **4.2.3 Cluster Interconnection System Impact Study.**

#### **4.2.3.1 Notice of Cluster Interconnection System Impact Study Entry Deadline.**

At the same time the System Operator issues the final CRPS report to the Planning Advisory Committee in accordance with Section 15.4 of Attachment K, the System Operator will provide notice of the entry deadline for the CSIS (the “Cluster Entry Deadline”) to the Interconnection Customers with Interconnection Requests identified in the final CRPS report as eligible to participate in the CSIS. The Cluster Entry Deadline shall be thirty (30) Calendar Days from the posting of the final CRPS report.

#### **4.2.3.2 Cluster Interconnection System Impact Study Entry Requirements.**

All Interconnection Requests identified in the final CRPS report, by Queue Position as assigned in accordance with Section 4.1 of this ETU IP, shall be eligible to be studied together in the CSIS.

**4.2.3.2.1 Cluster Entry Deadline Election.** By the Cluster Entry Deadline, an Interconnection Customer with an Interconnection Request identified as eligible to be studied in the CSIS must, in writing:

1. withdraw the Interconnection Request, pursuant to Section 3.6;
2. request that the System Operator re-assign the Interconnection Customer’s Interconnection Request a new Queue Position at the bottom of the queue as of the Cluster Entry Deadline in relative order with any other Interconnection Requests requesting to be re-queued under this Section 4.2.3.2.1; or
3. request to be included in the CSIS and meet the CSIS entry requirements specified in Section 4.2.3.2.2.

If, by the Cluster Entry Deadline, Interconnection Customer fails to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or request to be included in the CSIS and meet the CSIS entry requirements, then the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If Interconnection Customer elects option (iii) and does not meet all of the CSIS entry requirements specified in Section 4.2.3.2.2 by the Cluster Entry Deadline, the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If an initial Cluster Participation Deposit had been submitted as part of the incomplete CSIS entry requirements submission, the initial Cluster Participation Deposit will be refunded at the time the Interconnection Request is withdrawn.

#### **4.2.3.2.2 CSIS Entry Requirements**

An Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS that elects option (iii) under Section 4.2.3.2.1 must meet the following CSIS entry requirements in order to be included in the CSIS:

**(1) Cluster System Impact Study Application.** By the Cluster Entry Deadline, Interconnection Customer must submit to the System Operator a completed Cluster System Impact Study Application in the form specified in Appendix 1, Attachment A-1, of this ETU IP requesting the inclusion of the Interconnection Request in the CSIS;

**(2) System Impact Study Agreement, Study Deposit, Technical Data, and Site Control.** If an Interconnection Feasibility Study Agreement or an Interconnection System Impact Study Agreement has been executed prior to the issuance of the final CRPS report identifying the Interconnection Request as eligible for inclusion in a CSIS, such agreement shall terminate upon execution of a new Interconnection System Impact Study Agreement in accordance with this Section 4.2.3.2.2, and any unused balance of the study deposit associated with the terminated agreement shall be applied toward the study deposit associated with the new Interconnection System Impact Study Agreement.

Within fifteen (15) Business Days following the Cluster Entry Deadline, the System Operator and Interconnecting Transmission Owner will provide to Interconnection Customer an Interconnection System Impact Study Agreement, including a non-binding good faith estimate of the costs and timeframe for commencing and completing the CSIS.

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after receipt along with continued demonstration of Site Control, the technical data called for in Appendix 1, Attachment A, and a refundable study deposit, to the extent that any additional study deposit is required, in accordance with Section 7.2 of this ETU IP.

**(3) Cluster Participation Deposit for the CSIS.** By the Cluster Entry Deadline, Interconnection Customer also must submit to the System Operator an initial Cluster Participation Deposit equal to: (a) for an External ETU, five (5) percent of the Interconnection Customer's cost allocation responsibility for



the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CRPS report, or (b) for an Internal ETU, the lesser of \$1,000,000 or five (5) percent of the Interconnection Customer's estimated costs for the Internal ETU as of the time the initial Cluster Participation Deposit is due. If the System Operator subsequently identifies that an Internal ETU has met the requirements to take the place of a CETU, or portion thereof, pursuant to Section 4.2.3.4 of this ETU IP, the initial Cluster Participation Deposit will be reduced to exclude the costs associated with the CETU, or portion thereof, that is being replaced by the Internal ETU, and the Interconnection Customer shall be refunded the corresponding amount. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The initial Cluster Participation Deposit will be fully refunded (with interest to be calculated in accordance with Section 3.6 of this ETU IP) to Interconnection Customer with an Interconnection Request that met the cluster entry requirements: (i) if the CSIS is initially undersubscribed by more than ten (10) percent of the quantity of megawatts that the CETU developed through the CRPS was designed to enable and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, before the CSIS starts, (ii) if the CSIS is initially oversubscribed as described in Section 4.2.3.3.2 of this ETU IP (e.g., the CETU developed through the CRPS is designed to enable 1,000 MW and more than 1,000 MW meet the CSIS entry requirements by the Cluster Entry Deadline), in which case the Cluster Participation Deposits will be refunded to Interconnection Customers with Interconnection Requests corresponding to the oversubscribed megawatt quantities, (iii) if the cost estimates for the CETU and the associated system upgrades provided in the final CRPS report for the entire cluster have increased by twenty-five (25) percent or more when compared to the cost estimates provided in the draft CSIS report or the draft CFAC report and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within thirty (30) Calendar Days after receipt of the draft CSIS report or the draft CFAC report in accordance with Sections 7.5 and 8.3 of this ETU IP, respectively, (iv) if less than two (2) Interconnection Requests included in the CSIS or CFAC remain in the interconnection queue during the CSIS or CFAC, as applicable, in which case, the CSIS or the CFAC terminates and the remaining Interconnection Request proceeds in serial queue order, (v) at the time the Interconnection Customer with an Interconnection Request included in the CSIS provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this ETU IP, (vi) if no Interconnection Customer with an Interconnection Request included in the cluster executes an Interconnection Agreement and provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this ETU IP, or (vii) if all Interconnection Requests included in the cluster withdraw from the interconnection queue.

Otherwise, the initial Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue at any time after the Cluster Entry Deadline. The non-refundable initial Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **4.2.3.3 Cluster Filling, Oversubscription and Backfilling Upon Withdrawal.**

**4.2.3.3.1 Cluster Filling.** The CSIS shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area relative to the CETU identified in the final CRPS report that do not yet have a completed Interconnection System Impact Study and met the CSIS entry requirements by the Cluster Entry Deadline up to the approximate megawatt quantity identified in the final CRPS report as potentially enabled by the CETU. The Interconnection Requests will be included in the CSIS in queue order, based on the Queue Positions assigned in accordance with Section 4.1 of this ETU IP, relative to other eligible Interconnection Requests.

**4.2.3.3.2 Cluster Oversubscription.** If an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to participate in a CSIS met the CSIS entry requirements and therefore would have been eligible for inclusion in the CSIS but is excluded as a result of the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report having been exhausted in queue order under Section 4.2.3.3.1, (i) the initial Cluster Participation Deposit will be refunded to the Interconnection Customer, and (ii) the Interconnection Request will maintain its Queue Position. If there are two (2) or more Interconnection Request after the CSIS is filled, the System Operator will initiate another cluster to identify the transmission infrastructure to enable the interconnection of another round of Interconnection Requests consistent with Section 15.1 of Attachment K.

**4.2.3.3.3 Cluster Backfilling Upon Withdrawal.** Upon withdrawal of an Interconnection Request that is included in the CSIS, the System Operator will backfill the CSIS, in queue order, with later-queued Interconnection Requests consistent with the methodology used to fill the original CSIS as specified in Section 4.2.3.3.1 of this ETU IP. The System Operator will notify all Interconnection Customers with

Interconnection Requests identified by the System Operator as eligible for backfilling that the respective Elective Transmission Upgrade (or part thereof) proposed in the Interconnection Request is eligible to participate in the CSIS, and the Interconnection Customer shall have thirty (30) Calendar Days from receipt of System Operator's notice to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or accept the inclusion of the Interconnection Request (or part thereof, in which case the Interconnection Customer shall modify the Interconnection Request to reflect the appropriate reduction) in the CSIS and meet the CSIS entry requirements, consistent with Section 4.2.3.2 of this ETU IP. If the Interconnection Customer does not make one of these three elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure and consider other later-queued Interconnection Requests.

**4.2.3.4 Scope of Cluster Interconnection System Impact Study.** Except as otherwise provided in this Section 4.2.3.4, the CSIS shall be conducted in accordance with Sections 7.3 and 7.4 of this ETU IP. The Study Case developed for the CSIS shall also include the CETU and associated system upgrades identified in the final CRPS report. An Internal ETU can be considered, and included in the CSIS, in place of a CETU, or portion thereof, if all of the Interconnection Customers with Interconnection Requests included in the cluster that the ISO has determined need to use the Internal ETU have indicated in the Cluster Application Form or with the executed Interconnection System Impact Study Agreement that they have a contractual commitment in place providing for the Interconnection Customers to fund and the right to use the Internal ETU. The CSIS shall evaluate the proposed interconnections to the New England Transmission System under the NC Interconnection Standard consistent with Section 3.2.2 of this ETU IP and as detailed in the ISO New England Planning Procedures. Consistent with the NC Interconnection Standard, the evaluation will include conditions where the projects proposed in the Interconnection Requests that are included in the CSIS are not dispatched against each other if they do not share a system constraint that would provide the basis for a redispatch condition. The CSIS shall consist of the analysis specified in Section 7.3 of this ETU IP except for analysis associated with an Interconnection Feasibility Study or a preliminary, non-binding, analysis. An Interconnection Customer with an Interconnection Request being studied as part of the CSIS cannot elect to have the Interconnection Feasibility Study or a preliminary, non-binding, analysis performed as part of the CSIS.

**4.2.3.5. Restudy of Cluster Interconnection System Impact Study.** In addition to the circumstances specified in Section 7.6 of this ETU IP, a re-study of the CSIS is required due to the withdrawal of an

Interconnection Request that had been included in the CSIS. Upon withdrawal of an Interconnection Request that had been included in the CSIS, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study will be conducted to determine if there are any changes in the upgrades identified during the CSIS with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

#### **4.2.4. Cluster Interconnection Facilities Study.**

Notwithstanding any other provision in this ETU IP, an Interconnection Customer with an Interconnection Request included in a completed CSIS will not be eligible to waive the, or request a separate, CFAC. All Interconnection Customers with an Interconnection Request included in a completed CSIS shall be studied together in the CFAC for the purpose of implementing the conclusions of the CSIS with respect to non-sole use facilities.

**4.2.4.1 Cluster Interconnection Facilities Study Entry Requirements.** An Interconnection Customer with an Interconnection Request that was included in a completed CSIS shall execute an Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator, together with the required technical data and refundable deposit for the Interconnection Facilities Study as specified in Section 8.1 of this ETU IP.

**4.2.4.2. Scope of Interconnection Facilities Study.** The CFAC will be conducted in accordance with Sections 8.2 and 8.3 of this ETU IP based on a +/- 20 percent good faith cost estimate.

**4.2.4.3 Re-study of the Interconnection Facilities Study.** In addition to the circumstances specified in Section 8.5 of this ETU IP, a re-study of the CFAC is required due to the withdrawal of an Interconnection Request that had been included in the CFAC. Upon withdrawal of an Interconnection Request included in the CFAC, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study of the CSIS and CFAC will be conducted to determine if there are any changes in the upgrades identified during the CSIS and CFAC with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

**4.2.4.4 Additional Cluster Participation Deposit.** Within thirty (30) Calendar Days after receipt of the final CFAC report in accordance with Section 8.3 of this ETU IP, an Interconnection Customer with an Interconnection Request included in the CFAC shall submit to the System Operator an additional Cluster Participation Deposit equal to: (a) for an External ETU, five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CFAC report, or (b) for an Internal ETU, the lesser of \$1,000,000 or five (5) percent of the Interconnection Customer's estimated costs for the Internal ETU as of the time the additional Cluster Participation Deposit is due. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The additional Cluster Participation Deposit provided under this Section 4.2.4.4 will be fully refunded (with interest to be calculated in accordance with Section 3.6 of this ETU IP) to Interconnection Customer that submitted the additional Cluster Participation Deposit if the conditions specified in Sections 4.2.3.2.2(3)(v), (vi) or (vii) above occur.

Otherwise, the additional Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue. The non-refundable additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

### **4.3 Transferability of Queue Position.**

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Elective Transmission Upgrade identified in the Interconnection Request and the Point of Interconnection does not change. The Interconnection Customer must notify the System Operator, in writing, of any transfers of Queue Position and must provide the System Operator with the transferee's contact information, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

### **4.4 Modifications.**

The Interconnection Customer shall submit to System Operator and Interconnecting Transmission Owner, in writing, modifications to any information provided in the Interconnection Request, including its

attachments. The Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Sections 4.4.1 or 4.4.4, or are determined not to be Material Modifications pursuant to Section 4.4.2. The System Operator will notify the Interconnecting Transmission Owner, and, when System Operator deems it appropriate in accordance with applicable codes of conduct and confidentiality requirements, it will notify any Affected Party of such modifications.

A new Interconnection Request shall be required to: (1) increase the capability of an Elective Transmission Upgrade above that specified in an Interconnection Request, or an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission); (2) change from NI Interconnection Service to CNI Interconnection Service, in which case a new Interconnection Request for CNI Interconnection Service shall be required; or (3) change the objective specified in an Interconnection Request. Such new Interconnection Request will receive the lowest Queue Position available at the time the Interconnection Request is submitted for purposes of cost allocation and study analysis.

Notwithstanding the foregoing, an Interconnection Customer with an Interconnection Request for CNI Interconnection Service has until the Forward Capacity Auction for which the associated Capacity Commitment Period begins less than seven (7) years (or the years agreed to pursuant to Section 3.3.1 or Section 4.4.5) from the date of the original Interconnection Request for CNI Interconnection Service for an Import Capacity Resource(s) associated with its Elective Transmission Upgrade to clear the entire megawatt amount for which CNI Interconnection Service was requested. A new Interconnection Request for CNI Interconnection Service will be required for the Elective Transmission Upgrade to enable the participation of an Import Capacity Resource in any subsequent auctions.

During the course of the Interconnection Studies, either the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes do not constitute a Material Modification and are acceptable to the Parties, such acceptance not to be unreasonably withheld, System Operator and the Interconnecting Transmission Owner shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 6.4, Section 7.6 and Section 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

**4.4.1** Prior to the commencement of the Interconnection System Impact Study, modifications permitted under this Section shall include specifically: (a) a decrease of up to 60 percent in the capability of the proposed project; (b) modifying the technical parameters associated with the Elective Transmission Upgrade technology or characteristics; and (c) modifying the interconnection configuration.

Notwithstanding the foregoing, an Interconnection Customer may decrease the electrical output of a proposed Elective Transmission Upgrade after the Cluster Entry Deadline specified in Section 4.2.3.1 of this ETU IP; however, the requesting Interconnection Customer remains responsible for costs corresponding to the megawatt quantity requested as of the Cluster Entry Deadline.

**4.4.2** Prior to making any modification other than those specifically permitted by Sections 4.4.1 and 4.4.4, Interconnection Customer may first request that the System Operator and Interconnecting Transmission Owner evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, the System Operator in consultation with the Interconnecting Transmission Owner, and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall evaluate, at the Interconnection Customer's cost, the proposed modifications prior to making them and the System Operator will inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Sections 4.4.1, 6.1, 7.2 or so allowed elsewhere, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

**4.4.3** Upon receipt of Interconnection Customer's request for modification that does not constitute a Material Modification and therefore is permitted under this Section 4.4, the System Operator in consultation with the Interconnecting Transmission Owner and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall commence and perform any necessary additional studies as soon as practicable, but in no event shall the System Operator, Interconnecting Transmission Owner, or Affected Party commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.

**4.4.4** Extensions of less than three (3) cumulative years in the Commercial Operation Date, In-Service Date or Trial Operation Date of the Elective Transmission Upgrade to which the Interconnection Request relates are not material and should be handled through construction sequencing, provided that the extension(s) do not exceed seven (7) years from the date the Interconnection Request was received by the System Operator.

**4.4.5** Extensions of three (3) or more cumulative years in the Commercial Operation Date, In-Service Date or Trial Operation Date of the Elective Transmission Upgrade to which the Interconnection Request relates or any extension of a duration that results in the Trial Operation Date exceeding the date the Interconnection Request was received by the System Operator by seven (7) or more years is a Material Modification unless the Interconnection Customer demonstrates to the System Operator due diligence in pursuit of permitting, licensing and construction of the Elective Transmission Upgrade to meet the Commercial Operation Date, In-Service Date or Trial Operation Date provided in the Interconnection Request. Such demonstration shall be based on evidence to be provided by the Interconnection Customer of accomplishments in permitting, licensing, and construction in an effort to meet the Commercial Operation Date, In-Service Date or Trial Operation Date provided in this Interconnection Request. Such evidence may include filed documents, records of public hearings, governmental agency findings, documentation of actual construction progress, including the previous four (4) months. If the evidence demonstrates that the Interconnection Customer did not undertake reasonable efforts to meet the Commercial Operation Date, In-Service Date or Trial Operation Date specified in the Interconnection Request, or demonstrates that reasonable efforts were not undertaken until four (4) months prior to the request for extension, the request for extension shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed Material Modification or proceed with a new Interconnection Request for such modification.

## **SECTION 5. PROCEDURES FOR TRANSITION.**

### **5.1 Rules for Establishing Queue Position for Interconnection Requests Pending Prior to February 16, 2015.**

**5.1.1** An Interconnection Customer with a request for Elective Transmission Upgrade submitted prior to February 16, 2015, shall be assigned a Queue Position pursuant to the following provisions.



**5.1.1.1** If the Interconnection Customer's Elective Transmission Upgrade has received an approval pursuant to Section I.3.9 of the Tariff prior to February 16, 2015:

**5.1.1.1.1** The Interconnection Request shall be assigned a Queue Position based on the date of the Elective Transmission Upgrade's approval pursuant to Section I.3.9 of the Tariff and shall be respected by all Interconnection Requests with a lower Queue Position than the Elective Transmission Upgrade's assigned Queue Position. The assigned Queue Position for an Interconnection Request of an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for NI Interconnection Service. Within sixty (60) days from February 16, 2015, the Interconnection Customer must: (a) proceed as directed in Section 8 of this ETU IP, and (b) submit a deposit of \$47,500 for the difference between the former Elective Transmission Upgrade application deposit (*i.e.*, \$ 2,500) and the new Elective Transmission Upgrade Interconnection Request deposit (*i.e.*, \$50,000) to be applied toward the costs of developing the ETU IA. Notwithstanding any other provision in this ETU IP, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request will be deemed withdrawn.

**5.1.1.1.2** The Interconnection Request shall be assigned a placeholder to establish a separate Queue Position for CNI Interconnection Service if the Interconnection Customer proposing an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility submits a valid Interconnection Request for CNI Interconnection Service within sixty (60) days from February 16, 2015. The Interconnection Customer's Interconnection Request for CNI Interconnection Service may also include a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. The placeholder for such Queue Position shall be at the bottom of the queue as of February 16, 2015, in relative order with any other Elective Transmission Upgrade Interconnection Request that falls under this Section 5.1.1.1.2. Notwithstanding any other provision in this ETU IP, if a valid Interconnection Request for CNI Interconnection Service is not submitted within a period not to exceed sixty (60) days from February 16, 2015, the placeholder Queue Position shall be deemed withdrawn.

**5.1.1.2** If the Interconnection Customer's Elective Transmission Upgrade has not received an approval pursuant to Section I.3.9 of the Tariff prior to February 16, 2015:

**5.1.1.2.1** An Interconnection Request with a System Impact Study Agreement that has been executed prior to February 16, 2015, and has been recognized by the System Operator as actively under study, shall be assigned a Queue Position at the bottom of the queue as of February 16, 2015, below the Queue Position of the Elective Transmission Upgrade Interconnection Requests that fall under Section 5.1.1.1.2 and in relative order based on the date of the former Elective Transmission Upgrade application submitted pursuant to Section II.47.5 of the Tariff, with any other Elective Transmission Upgrade Interconnection Request that falls under this Section 5.1.1.2.1. The assigned Queue Position of an Interconnection Request for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for CNI Interconnection Service unless the Interconnection Customer indicates in its updated Interconnection Request that it only seeks NI Interconnection Service. The System Impact Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the ETU IP in effect on February 16, 2015 (or as revised thereafter), including potential re-study to accommodate the revised queue. Within sixty (60) days from February 16, 2015, the Interconnection Customer shall submit: (a) an updated Interconnection Request for the same Elective Transmission Upgrade proposed in the former Elective Transmission Upgrade application submitted under Section II.47.5 of the Tariff together with all data requested to facilitate the System Operator, in coordination with Interconnecting Transmission Owner and Affected Party as deemed appropriate by the System Operator, completion of the System Impact Study, and (b) a deposit of \$250,000 minus any amounts already paid to the System Operator for estimated costs of the System Operator and the Interconnecting Transmission Owner to be applied toward the costs of the remaining study work and development of the ETU IA. At that time, Interconnection Customers with an Interconnection Request for CNI Interconnection Service may also include in its updated Interconnection Request a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. Notwithstanding any other provision in this ETU IP, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request shall be deemed withdrawn.

**5.1.1.2.2** An Interconnection Customer with a System Impact Study Agreement that has been executed prior to February 16, 2015, but is not recognized by the System Operator as actively under study, shall be assigned a Queue Position at the bottom of the queue as of February 16, 2015, below the Queue Position of the Elective Transmission Upgrade Interconnection Requests that fall under Section 5.1.1.2.1 and in relative order with any other Elective Transmission Upgrade Interconnection Request that falls under this

Section 5.1.1.2.2. The assigned Queue Position of an Interconnection Request for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for CNI Interconnection Service unless the Interconnection Customer indicates in its updated Interconnection Request that it only seeks NI Interconnection Service. The System Impact Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the ETU IP in effective on February 16, 2015 (or as revised thereafter), including potential re-study to accommodate the revised queue. Within sixty (60) days from February 16, 2015, the Interconnection Customer shall submit: (a) an updated Interconnection Request for the same Elective Transmission Upgrade proposed in the former Elective Transmission Upgrade application submitted under Section II.47.5 of the Tariff together with all data requested to facilitate the System Operator, in coordination with Interconnecting Transmission Owner and Affected Party as deemed appropriate by the System Operator, conduct of the System Impact Study, and (b) \$250,000 to be applied toward the costs of the System Impact Study and development of the ETU IA. At that time, Interconnection Customers with an Interconnection Request for CNI Interconnection Service may also include in its updated Interconnection Request a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. Notwithstanding any other provision in this ETU IA, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request shall be deemed withdrawn.

**5.1.1.2.3** An Interconnection Customer that does not have an executed System Impact Study Agreement prior to February 16, 2015, shall be assigned a Queue Position at the bottom of the queue as of February 16, 2015, below the Queue Position of the Elective Transmission Upgrade Interconnection Requests that fall under Section 5.1.1.2.2 and in relative order with any other Elective Transmission Upgrade Interconnection Request that falls under this Section 5.1.1.2.3. The assigned Queue Position of an Interconnection Request for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for CNI Interconnection Service unless the Interconnection Customer provides written notification to the System Operator that it seeks only NI Interconnection Service. Within sixty (60) days from February 16, 2015, the Interconnection Customer shall: (a) submit an updated Interconnection Request for the same Elective Transmission Upgrade proposed in the former Elective Transmission Upgrade application submitted under Section II.47.5 of the Tariff together with all data requested to facilitate the System Operator, in coordination with Interconnecting Transmission Owner and Affected Party as deemed appropriate by the System Operator, conduct of the Interconnection

Studies, (b) submit a deposit of \$47,500 for the difference between the former Elective Transmission Upgrade application deposit (*i.e.*, \$ 2,500) and the new Elective Transmission Upgrade Interconnection Request deposit (*i.e.*, \$50,000) to be applied toward the costs of the Interconnection Studies and development of the ETU IA, and (c) proceed as directed in Section 6 of this ETU IP. At that time, Interconnection Customers with an Interconnection Request for CNI Interconnection Service may also include a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. Interconnection Studies shall be processed in accordance with the version of the ETU IP in effective on February 16, 2015 (or as revised thereafter). Notwithstanding any other provision in this ETU IP, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request shall be deemed withdrawn.

## **5.2 Transition Rules for Pending Interconnection Requests After February 16, 2015.**

**5.2.1** Any Interconnection Customer assigned a Queue Position prior to November, 1 2017, shall retain that Queue Position subject to Section 4.4 of this ETU IP.

**5.2.1.1** If an Interconnection Study Agreement has not been executed prior to November 1, 2017, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with the version of this ETU IP in effect on November 1, 2017 (or as revised thereafter).

**5.2.1.2** If an Interconnection Study Agreement has been executed prior to November 1, 2017 and is actively under study, such Interconnection Study shall be completed in accordance with the terms of such agreement. If an Interconnection Study Agreement has been executed prior to November 1, 2017, but the Interconnection Study has not commenced, such Interconnection Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the ETU IP in effect on November 1, 2017. Interconnection Studies for Interconnection Requests seeking to interconnect into the Northern and Western Maine parts of the New England Control Area that do not have a completed Interconnection System Impact Study by November 1, 2017 shall be included in the Maine Resource Integration Study, which shall be the first CRPS. The Interconnection Customers identified in the Maine Resource Integration Study as eligible to participate in the associated Cluster System Impact Study shall make one of the elections and complete the associated requirements specified in Section 4.2.3.2 of this ETU IP within thirty (30) Calendar Days from the later of November 1, 2017 or

the issuance of the final Maine Resource Integration Study report. If the Interconnection Customer does not make one of the elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure.

**5.2.2 Transition Period.** To the extent necessary, the System Operator, Interconnection Customers with an outstanding Interconnection Request (i.e., an Interconnection Request for which an ETU IA has neither been executed nor submitted to the Commission for approval prior to November 1, 2017), Interconnecting Transmission Owner and any other Affected Parties, shall transition to proceeding under the version of the ETU IP in effect as of November 1, 2017 (or as revised thereafter) within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term “outstanding Interconnection Request” herein shall mean any Interconnection Request, on November 1, 2017: (i) that has been submitted, together with the required deposit and attachments, but not yet accepted by the System Operator; (ii) where the related ETU IA has not yet been submitted to the Commission for approval in executed or unexecuted form, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding Interconnection Request as of the effective date of this ETU IP may request a reasonable extension of the next applicable deadline if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension, not to exceed sixty (60) Calendar Days, shall be granted by the System Operator to the extent consistent with the intent and process provided for under this ETU IP.

### **5.3 New System Operator or Interconnecting Transmission Owner.**

If the System Operator transfers operational control of the New England Transmission System to a successor System Operator during the period when an Interconnection Request is pending, the System Operator shall transfer to the successor System Operator any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this ETU IP shall be paid by or refunded to the Interconnection Customer, as appropriate. The System Operator shall coordinate with the successor System Operator to complete any Interconnection Study, as appropriate, that the System Operator has begun but has not completed.

If the Interconnecting Transmission Owner transfers ownership of its transmission facilities to a successor transmission owner during the period when an Interconnection Request is pending, and System Operator in conjunction with Interconnecting Transmission Owner has tendered a draft ETU IA to the Interconnection Customer but the Interconnection Customer has not either executed the ETU IA or requested the filing of an unexecuted ETU IA with the Commission, unless otherwise provided, the Interconnection Customer must complete negotiations with the successor transmission owner.

## **SECTION 6. INTERCONNECTION FEASIBILITY STUDY.**

### **6.1 Interconnection Feasibility Study Agreement.**

Except as otherwise provided in Section 4.2.3.4 of this ETU IP, the Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study under this Section 6, or as part of the Interconnection System Impact Study under Section 7. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and the System Operator shall be responsible for generating only one final report, which will include the results of both Section 6 and Section 7.

Within five (5) Business Days following the System Operator's and Interconnecting Transmission Owner's receipt from the Interconnection Customer of its designation of the Point(s) of Interconnection and of the type of study to be performed pursuant to Section 3.3.4, System Operator shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement, which includes a good faith estimate of the cost for completing the Interconnection Feasibility Study. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). No later than thirty (30) Calendar Days after its receipt of the Interconnection Feasibility Study Agreement, (a) the Interconnection Customer shall execute and deliver the agreement to System Operator and the Interconnecting Transmission Owner, (b) the Interconnection Customer shall also deliver the refundable deposit for the Interconnection Feasibility Study to the System Operator, and (c) the technical data called for in Appendix 1, Attachment B. The deposit for the study shall be 100 percent

of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection Feasibility Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Interconnection Feasibility Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner on the Interconnection Feasibility Study, including the development of the study agreement and its attachment(s). The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold any amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection Feasibility Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A or B, depending on the scope elected pursuant to Section 3.3.1. If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection Feasibility Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection Feasibility Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection Feasibility Study Agreement or deposit.

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to the Parties, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall

be completed pursuant to Section 6.4 as applicable. For the purpose of this Section 6.1, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Section 3.3.4, shall be the substitute.

## **6.2 Scope of Interconnection Feasibility Study.**

The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Administered Transmission System with available data and information. The Interconnection Feasibility Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection Feasibility Study). An Interconnection Customer with a CNI Interconnection Service Interconnection Request may also request that the Interconnection Feasibility Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection Feasibility Study Agreement. The Interconnection Feasibility Study will consist of a power flow, including thermal analysis and voltage analysis, and short circuit analysis. The Interconnection Feasibility Study report will provide (i) a list of facilities, and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct the Interconnection Facilities and Network Upgrades; (iii) a protection assessment to determine the required Interconnection Facilities; and may provide (iv) an evaluation of the siting of Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environmental work for Interconnection Facilities and Network Upgrades.

Alternatively, in the case where the Interconnection Customer requests that the Interconnection Feasibility Study be completed as a separate and distinct study, the Interconnection Customer may



provide the technical data called for in Appendix 1, Attachment A with the executed Interconnection Feasibility Study Agreement and request that the Interconnection Feasibility Study consist of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade's interconnection given recent study experience and as discussed at the Scoping Meeting. In this case, the Interconnection Feasibility Study report will provide (i) the study findings; and, (ii) a preliminary description of a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Elective Transmission Upgrade as identified within the scope of the analysis performed as part of the study. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 6.2, the Interconnection Feasibility Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

### **6.3 Interconnection Feasibility Study Procedures.**

The System Operator in coordination with Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than forty-five (45) Calendar Days after System Operator and Interconnecting Transmission Owner receive the fully executed Interconnection Feasibility Study Agreement, study deposit and required technical data in accordance with Section 6.1. At the request of the Interconnection Customer or at any time the System Operator or the Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the System Operator is unable to complete the Interconnection Feasibility Study within that time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator with input from the Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow and short circuit databases that have been developed for the Interconnection Feasibility Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the

confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

### **6.3.1 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection Feasibility Study report to the Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Feasibility Study.

### **6.4 Re-Study.**

If re-study of the Interconnection Feasibility Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-designation of the Point of Interconnection pursuant to Section 6.1, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Feasibility Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Feasibility Study Agreement.

The Interconnection Customer shall have the option to waive the re-study and elect to have the re-study performed as part of its Interconnection System Impact Study. The Interconnection Customer shall provide written notice of the waiver and election of moving directly to the Interconnection System Impact Study within five (5) Business Days of receiving notice from the System Operator of the required re-study.

## **SECTION 7. INTERCONNECTION SYSTEM IMPACT STUDY.**

### **7.1 Interconnection System Impact Study Agreement.**

If the Interconnection Customer did not request that the Interconnection Feasibility Study be completed as a separate and distinct study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and the System Operator shall be responsible for generating only one final report, which will include the results of both Section 6 and Section 7.

Within five (5) Business Days following the Interconnection Feasibility Study results meeting, or subsequent to the Scoping Meeting within five (5) Business Days following the receipt of designation of the Point(s) of Interconnection and type of study to be performed pursuant to Section 3.3.4, if the Interconnection Customer did not request that the Interconnection Feasibility Study be completed as a separate and distinct study, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer the Interconnection System Impact Study Agreement, which includes a non-binding good faith estimate of the cost and timeframe for commencing and completing the Interconnection System Impact Study. The Interconnection System Impact Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the ETU IA.

### **7.2 Execution of Interconnection System Impact Study Agreement.**

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after its receipt along with a demonstration of Site Control and the technical data called for in Appendix 1, Attachment A, and the Interconnection Customer shall also deliver a refundable deposit. An Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for (i) a modification to the Interconnection Customer's existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the

modification proposed in the Interconnection Request does not require additional real property, or (ii) a modification of an existing Pool Transmission Facility that is not owned by the Interconnection Customer. If a PSCAD model was determined to be needed for the Elective Transmission Upgrade at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model. The deposit for the study shall be the greater of 100 percent of the estimated cost of the study or \$250,000.

The deposit shall be applied toward the cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the ETU IA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection System Impact Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of Interconnection System Impact Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the System Impact Study, including the study agreement and its attachment(s) and the ETU IA. In the case of Clustering, CSIS costs that are associated with an individual Interconnection Request assessed within the CSIS will be charged directly to that Interconnection Customer. CSIS costs that are associated with the CSIS as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. If the Interconnection Customer elects the deposit described in (ii) above, the System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection System Impact Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the

technical data called for in Appendix 1, Attachment A; provided that if a PSCAD model was determined to be needed at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model.

If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.

If the Interconnection System Impact Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting or the Interconnection Feasibility Study, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to each Party, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to Section 7.6 as applicable. For the purpose of this Section 7.2, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement or Interconnection System Impact Study depending on whether Interconnection Customer requested that the Interconnection Feasibility Study be completed as a separate and distinct study or as part of the Interconnection System Impact Study, as specified pursuant to Section 3.3.4, shall be the substitute.

### **7.3 Scope of Interconnection System Impact Study.**

The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability and operation of the New England Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued

Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection System Impact Study). An Interconnection Customer with a CNI Interconnection Service Interconnection Request may also request that the Interconnection System Impact Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer’s Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection System Impact Study Agreement.

The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis and any other analyses, such as electromagnetic transient analysis, that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner. The Interconnection System Impact Study report will state the assumptions upon which it is based, state the results of the analyses, and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Interconnection System Impact Study report will provide (i) a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct; (iii) a protection assessment to determine the required protection upgrades; and may provide (iv) an evaluation of the siting of the Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environment work. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.3, the Interconnection System Impact Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer’s Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

#### **7.4 Interconnection System Impact Study Procedures.**

The System Operator shall coordinate the Interconnection System Impact Study with the Interconnecting Transmission Owner, and with any Affected Party as deemed appropriate by the System Operator in

accordance with applicable codes of conduct and confidentiality requirements, that is affected by the Interconnection Request pursuant to Section 3.5 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection System Impact Study within ninety (90) Calendar Days after the receipt of the Interconnection System Impact Study Agreement, study deposit, demonstration of Site Control, if Site Control is required, and required technical data in accordance with Section 7.2. If System Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within the times specified in this Section 7.4.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the System Operator and Interconnecting Transmission Owner are unable to complete the Interconnection System Impact Study within the time period, the System Operator shall notify the Interconnection Customer and provide an estimated start date if the study has not commenced and completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow, short circuit and stability databases that have been developed for the Interconnection System Impact Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

Except in the case of a CSIS, the System Operator shall notify the Interconnection Customer when the Interconnection System Impact Study is expected to commence within sixty-five (65) Calendar Days. An Interconnection Customer with an Interconnection Request being studied serially will be permitted to update the technical data provided in Appendix 1 and Attachment A, and submit modifications to that technical data to the System Operator no later than sixty (60) Calendar Days from the date that the System Operator notified the Interconnection Customer that the Interconnection System Impact Study is expected

to commence. Such modifications will not be deemed Material Modifications provided they meet the requirements of Section 4.4.1 of this ETU IP.

Where sufficient time has elapsed since the initial Scoping Meeting, within ten (10) Business Days after notifying the Interconnection Customer that the Interconnection System Impact Study is expected to commence, the System Operator may convene a second Scoping Meeting for the purpose of providing updated information to the Interconnection Customer in preparation for the submittal of updates to the technical data.

## **7.5 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, the System Operator shall convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, to discuss the results of the Interconnection System Impact Study.

Within ten (10) Business Days following the study results meeting, the Interconnection Customer shall provide to the System Operator written notice that it will either pursue the Interconnection Facilities Study or waive the Interconnection Facilities Study and elect an expedited interconnection. Once the Interconnection Customer notifies the System Operator of its election, such election is not subject to change. If the Interconnection Customer elects to pursue the Facilities Study it must proceed with the study. If the Interconnection Customer waives the Facilities Study, it shall commit to the following milestones in the ETU IA: (i) Siting process and approval schedule for the Elective Transmission Upgrade and Interconnection Facilities; (ii) Engineering of Interconnection Facilities and Elective Transmission upgrade approved by Interconnecting Transmission Owner; (iii) Ordering of long lead time material for Interconnection Facilities and system upgrades; (iv) Trial Operation Date; and (v) Commercial Operation Date.

Within thirty (30) Calendar Days of the Interconnection Customer receiving the Interconnection System Impact Study report, the Interconnection Customer shall provide written comments on the report or written notice that it has no comments on the report. The System Operator shall issue a final Interconnection System Impact Study report within fifteen (15) Business Days of receiving the



Interconnection Customer's comments or promptly upon receiving the Interconnection Customer's notice that it will not provide comments.

#### **7.6 Re-Study.**

If re-study of the Interconnection System Impact Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) re-designation of the Point of Interconnection pursuant to Section 7.2, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing.

Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection System Impact Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection System Impact Study Agreement.

#### **7.7 Operational Readiness.**

The System Operator shall, as close to the Interconnection Customer's actual Trial Operation Date as reasonably possible, ensure that operational analysis, including current stability analyses, power flow analyses, and any other analyses deemed necessary by the System Operator, are performed, and that procedures are developed or updated to address the operation of the New England Transmission System with the addition of the Interconnection Customer's Elective Transmission Upgrade. The operational analysis will also include tests of system performance with selected facilities out of service. Such studies shall be performed at the expense of the Interconnection Customer.

The System Operator is not obligated to perform the operational analyses described in this Section 7.7 if, in the exercise of reasonable discretion, the System Operator in consultation with Interconnecting Transmission Owner determines that interconnection of the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System is remote and speculative.

## **SECTION 8. INTERCONNECTION FACILITIES STUDY.**

### **8.1 Interconnection Facilities Study Agreement.**

Except as otherwise provided in Section 4.2.4 of this ETU IP, the Interconnection Customer may waive the Interconnection Facilities Study and instead elect expedited interconnection, which means that the Interconnection Customer may enter into E&P Agreements under Section 9 if it had not already done so, and shall enter into an ETU IA in accordance with the requirements specified in Section 11.

If the Interconnection Customer waives the Interconnection Facilities Study, the Interconnection Customer, subject to the specific terms of the E&P Agreements, assumes all risks and shall pay all costs associated with equipment, engineering, procurement and construction work covered by the Interconnection Facilities Study as described in Section 8.2 below.

The System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this ETU IP simultaneously with the delivery of the Interconnection System Impact Study to the Interconnection Customer.

The Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection Facilities Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the ETU IA. Within three (3) Business Days following the Interconnection System Impact Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer a non-binding good faith estimate of the cost for completing the Interconnection Facilities Study in accordance with requirements specified in Section 8.3. The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator within thirty (30) Calendar Days after its receipt, together with the required technical data and the refundable deposit for the Interconnection Facilities Study. In accordance with Section 8.3, the Interconnection Customer shall specify in Attachment A to the Interconnection Facilities Study Agreement whether it wants no more than a +/- 20 percent or a +/- 10 percent good faith cost estimate contained in the report. The deposit for the study shall be the greater of twenty-five percent of the estimated cost of the study or \$250,000.

Any difference between the study deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the cost of the Interconnection Facilities Studies that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Interconnection Facilities Study, the study agreement and its attachment(s) and the ETU IA. In the case of Clustering, CFAC costs that are associated with an individual Interconnection Request assessed within the CFAC will be charged directly to that Interconnection Customer. CFAC costs that are associated with the CFAC as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

## **8.2 Scope of Interconnection Facilities Study.**

The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Administered Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The scope and cost of the Interconnection Facilities Study shall include completion of any engineering work limited to what is reasonably required to (i) estimate such aforementioned cost to the accuracy specified by the Interconnection Customer pursuant to Section 8.3, (ii) identify, configurations of required facilities and (iii) identify time requirements for construction and installation of required facilities.

## **8.3 Interconnection Facilities Study Procedures.**

The System Operator shall coordinate the Interconnection Facilities Study with Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, pursuant to Section 3.5 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the study and the System Operator shall issue a draft Interconnection Facilities Study report to the Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: ninety (90) Calendar Days, with no more than a +/- 20 percent good faith cost estimate contained in the report; or one hundred eighty (180) Calendar Days, if the Interconnection Customer requests a +/- 10 percent good faith cost estimate. Such cost estimates either individually or in the aggregate will be provided in the final study report. If the System Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection Facilities Study within the times specified in this Section 8.3.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Facilities Study, System Operator shall notify the Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, as to the schedule status of the Interconnection Facilities Study. If the System Operator is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, the System Operator shall notify the Interconnection Customer, Interconnecting Transmission Owner and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and provide an estimated completion date and an explanation of the reasons why additional time is required.

The Interconnection Customer and appropriate Affected Parties may, within thirty (30) Calendar Days after receipt of the draft report, provide written comments to the System Operator and Interconnecting Transmission Owner, which the System Operator shall include in the final report. The System Operator shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving

the Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The System Operator may reasonably extend such fifteen-day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the System Operator or Interconnecting Transmission Owner to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, or any third party consultant retained by the Interconnection Customer supporting documentation, with workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

#### **8.4 Meeting with Parties.**

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Facilities Study.

#### **8.5 Re-Study.**

If re-study of the Interconnection Facilities Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study

shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Facilities Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Facilities Study Agreement.

## **SECTION 9. ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT.**

Prior to executing an ETU IA, an Interconnection Customer may request, in order to advance the implementation of its interconnection, and the Interconnecting Transmission Owner and any Affected Party shall offer the Interconnection Customer, an E&P Agreement that authorizes the Interconnecting Transmission Owner and any Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the Interconnecting Transmission Owner or any Affected Party shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the ETU IP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer’s Queue Position or Trial Operation Date. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer, including a deposit of 100 percent of the estimated engineering and study costs, and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or an E&P Agreement is terminated by any Party, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the Interconnecting Transmission Owner or the Affected Party that is a party to an E&P Agreement may elect: (i) to take title to the equipment, in which event the Interconnecting Transmission Owner or relevant Affected Party shall refund the Interconnection Customer any amounts paid by the Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **SECTION 10. OPTIONAL INTERCONNECTION STUDY.**

### **10.1 Optional Interconnection Study Agreement.**

On or after the date when the Interconnection Customer receives Interconnection System Impact Study report and no later than five (5) Business Days after the study results meeting to review the report, the Interconnection Customer may request in writing, and the System Operator in coordination with the Interconnecting Transmission Owner shall perform, an Optional Interconnection Study. The request shall describe the assumptions that the Interconnection Customer wishes the System Operator to study within the scope described in Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, the System Operator shall provide to the Interconnecting Transmission Owner and the Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify the Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case, and (iii) specify the System Operator's and Interconnecting Transmission Owner's estimate of the cost of the Optional Interconnection Study. To the extent known by the System Operator, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. The Optional Interconnection Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Optional Interconnection Study, including the cost of developing the study agreement and its attachment(s). Notwithstanding the above, the System Operator and Interconnecting Transmission Owner shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the required technical data and the refundable deposit for the Optional Interconnection Study to the System Operator. The deposit for the study shall be 100 percent of the estimated cost of the study. Any difference between the study deposit and the actual cost of the Optional Interconnection Study shall be paid by or refunded to

the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Optional Interconnection Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Optional Interconnection Study and the study agreement and its attachments(s). The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

## **10.2 Scope of Optional Interconnection Study.**

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The System Operator shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

The Optional Interconnection Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis, and any other analyses that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner.

## **10.3 Optional Interconnection Study Procedures.**

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to the System Operator and Interconnecting Transmission Owner within ten (10) Business Days of the Interconnection Customer receipt of the Optional Interconnection Study Agreement. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed-upon time period specified within the Optional Interconnection Study Agreement. If the System Operator and



Interconnecting Transmission Owner are unable to complete the Optional Interconnection Study within such time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

#### **10.4 Meeting with Parties.**

Within ten (10) Business Days of providing an Optional Interconnection Study report to Interconnection Customer, System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Optional Interconnection Study.

#### **10.5 Interconnection Agreement Developed Based on Optional Interconnection Study.**

If the ETU IA for an Elective Transmission Upgrade is based on the results of an Optional Interconnection Study, the ETU IA shall reflect the conditions studied and any obligations that may involve: (i) additional studies if such conditions change, (ii) operational limits, or (iii) financial support for transmission upgrades.

### **SECTION 11. ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT (ETU IA).**

#### **11.1 Tender.**

Interconnection Customer shall tender comments or provide notice, in writing, to the System Operator and Interconnecting Transmission Owner that the Interconnection Customer has no comments on the draft Interconnection Facilities Study report or on the draft Interconnection System Impact Study report if the

Interconnection Customer waived the Interconnection Facilities Study, within thirty (30) Calendar Days of receipt of the report. Except as provided in the E&P Agreement or any mutual agreement by the entities that would be Parties to the ETU IA, the System Operator shall initiate the development of the ETU IA process within fifteen (15) Calendar Days after the comments are submitted or waived, by tendering to the Interconnection Customer a draft ETU IA, together with draft appendices completed by the System Operator, in conjunction with the Interconnecting Transmission Owner to the extent practicable. The draft ETU IA shall be in the form of the System Operator's Commission-approved standard form ETU IA which is in Appendix 6 to Schedule 25. The Interconnection Customer shall return the Interconnection Customer specific information required to complete the form of ETU IA, including the appendices, in Appendix 6 of Schedule 25 that the Interconnection Customer is willing to execute within thirty (30) Calendar Days after receipt of the draft from the System Operator.

### **11.2 Negotiation.**

Notwithstanding Section 11.1, at the request of the Interconnection Customer, the System Operator and Interconnecting Transmission Owner shall begin negotiations with the Interconnection Customer concerning the appendices to the ETU IA at any time after the Interconnection Facilities Study is complete or after the Interconnection System Impact Study is complete if the Interconnection Customer intends to waive the Interconnection Facilities Study. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner shall negotiate concerning any disputed provisions of the appendices to the draft ETU IA for not more than sixty (60) Calendar Days after tender by the System Operator of the draft ETU IA pursuant to Section 11. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft ETU IA pursuant to Section 11.1 and request submission of the unexecuted ETU IA with the Commission or initiate Dispute Resolution procedures pursuant to Section 13.5. If the Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to request either the filing of the unexecuted ETU IA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed the ETU IA, requested filing of an unexecuted ETU IA, or initiated Dispute Resolution procedures pursuant to Section 13.5 within sixty (60) Calendar Days of tender of by the System Operator of the draft ETU IA pursuant to Section 11.1, it shall be deemed to have withdrawn its Interconnection Request. The System Operator and Interconnecting Transmission Owner shall provide to the Interconnection Customer a final ETU IA within fifteen (15) Business Days after the mutually agreed completion of the negotiation process.

### **11.3 Evidence to be Provided by Interconnection Customer; Execution and Filing of ETU IA.**

#### **11.3.1 Evidence to be Provided by Interconnection Customer.**

**11.3.1.1 Site Control.** Within fifteen (15) Business Days after receipt of the final ETU IA, the Interconnection Customer shall provide (A) to the System Operator, reasonable evidence of continued Site Control, or (B) to the Interconnecting Transmission Owner posting of \$250,000 non-refundable additional security, which shall be applied toward future construction costs. If multiple Interconnecting Transmission Owners, the \$250,000 non-refundable additional security shall be distributed evenly among them. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for (i) a modification to the Interconnection Customer's existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property, or (ii) a modification of an existing Pool Transmission Facility that is not owned by the Interconnection Customer.

**11.3.1.2 Development Milestones.** Within fifteen (15) Business Days after receipt of the final ETU IA, the Interconnection Customer also shall provide to the System Operator reasonable evidence that one or more of the following milestones in the development of the Elective Transmission Upgrade, to be elected by the Interconnection Customer, has been achieved: (i) the submission of filings for regulatory siting; (ii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Elective Transmission Upgrade; (iii) execution of an agreement regarding the use of the Elective Transmission Upgrade; (iv) application for environmental or land use permit.

At the same time, the Interconnection Customer with an Interconnection Request that was not studied using Clustering, shall commit to a schedule for the payment of upgrades identified in the Interconnection Studies or an E&P Agreement and either: (A) provide evidence of approvals for all Major Permits for the Elective Transmission Upgrade, as defined in Section III.13.1.1.2.2(a) of the Tariff, or (B) provide to the Interconnecting Transmission Owner, in the form acceptable to the Interconnecting Transmission Owner, a refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades identified in the Interconnection Studies or an E&P Agreement, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for

an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final ETU IA. If the Interconnection Customer selects option (B) above, it shall also commit in the ETU IA to the achievement of: (i) milestones for the completion of Major Permit approvals, and (ii) in the case of a CNR Interconnection Request, milestones to align the ETU IA with the fulfillment of terms outlined in Section III.13 of the Tariff for participation in the Forward Capacity Market.

Within fifteen (15) Business Days after receipt of the final ETU IA, an Interconnection Customer with an Interconnection Request studied using Clustering that provided the additional Cluster Participation Deposit in accordance with Section 4.2.4.4 shall provide to the Interconnecting Transmission Owner, in cash, a potentially non-refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades, including any CETUs, identified in the CFAC, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final ETU IA. If the Interconnection Customer does not submit this deposit (or make the initial payment) by the fifteenth Business Day after receipt of the final ETU IA, the Interconnection Request shall be automatically withdrawn from the interconnection queue without further opportunity to cure, and the Interconnection Customer's initial and additional Cluster Participation Deposits shall become non-refundable. The non-refundable initial and additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in the cluster at time the facilities proposed in the Interconnection Requests achieve Commercial Operation. If an Interconnection Request is withdrawn after the Interconnection Customer's payment of twenty (20) percent of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner, then the payment shall be used to offset the costs of the CETU. Any unspent payments of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner will be refunded to the respective Interconnection Customers that executed the Interconnection Agreement and provided to the Interconnecting Transmission Owner the twenty (20) percent deposit (or initial payment) if all the associated Interconnection Requests are withdrawn from the interconnection queue and the associated Interconnection Agreements are terminated.

**11.3.2 Execution and Filing of ETU IA.** Within fifteen (15) Business Days after receipt of the final ETU IA, (i) the Interconnection Customer and Interconnecting Transmission Owner shall execute three

(3) originals of the tendered ETU IA, and return them to the System Operator, who will send an original to Interconnecting Transmission Owner and Interconnection Customer; or (ii) the Interconnection Customer shall request in writing that the System Operator and the Interconnecting Transmission Owner jointly file with the Commission an ETU IA in unexecuted form. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered ETU IA (if it does not conform with a Commission-approved standard form of interconnection agreement) or the request to file an unexecuted ETU IA, the System Operator and Interconnecting Transmission Owner, in accordance with Section 11.3.3 or Section 11.3.4, as appropriate, shall jointly file the ETU IA with the Commission, together with its explanation of any matters as to which the System Operator, Interconnection Customer or Interconnecting Transmission Owner disagree and support for the costs that the Interconnecting Transmission Owner proposes to charge to the Interconnection Customer under the ETU IA. An unexecuted ETU IA should contain terms and conditions deemed appropriate by the System Operator and Interconnecting Transmission Owner for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted ETU IA, they may proceed pending Commission action.

With respect to the interconnection of an Interconnection Customer under Schedule 25, the ETU IA shall be a three-party agreement among the Interconnecting Transmission Owner, the System Operator and the Interconnection Customer. If the Interconnecting Transmission Owner, System Operator and Interconnection Customer agree to the terms and conditions of a specific ETU IA, or any amendments to such an ETU IA, then the System Operator and Interconnecting Transmission Owner shall jointly file the executed ETU IA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act. To the extent the Interconnecting Transmission Owner, System Operator and Interconnection Customer cannot agree to proposed variations from the standard form of ETU IA in Appendix 6 or cannot otherwise agree to the terms and conditions of the ETU IA for such Elective Transmission Upgrade, or any amendments to such an ETU IA, then the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted ETU IA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act and shall identify the areas of disagreement in such filing, provided that, in the event of disagreement on terms and conditions of the ETU IA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of the Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the

Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on such terms and conditions.

**11.3.3** The Interconnecting Transmission Owner, acting on its own or jointly with the System Operator, may initiate a filing to amend this ETU IP and the standard form of ETU IA in Appendix 6 under Section 205 of the Federal Power Act and shall include in such filing the views of System Operator, provided that the standard applicable under Section 205 of the Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on any financial obligations of the Interconnecting Transmission Owner or the Interconnection Customer(s), and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets.

#### **11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final ETU IA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall perform their respective obligations in accordance with the terms of the ETU IA, subject to modification by the Commission. Upon submission of an unexecuted ETU IA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall promptly comply with the unexecuted ETU IA, subject to modification by the Commission.

#### **11.5 Other Regulatory Arrangements.**

Prior to achieving Commercial Operation, the Elective Transmission Upgrade must be under the Operational Authority of the System Operator pursuant to a Transmission Operating Agreement and establish a schedule under the ISO OATT pursuant to which service will be offered over the Elective Transmission Upgrade.

### **SECTION 12. CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES.**

#### **12.1 Schedule.**

The Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party shall negotiate in good faith concerning a schedule for the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades.

## **12.2 Construction Sequencing.**

**12.2.1 General.** In general, the Trial Operation Date of an Interconnection Customer seeking interconnection to the Administered Transmission System will determine the sequence of construction of Network Upgrades.

**12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than the Interconnection Customer.** An Interconnection Customer with an executed or unexecuted, but filed with the Commission, ETU IA, in order to maintain its Trial Operation Date, may request that the Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such Trial Operation Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than the Interconnection Customer that is seeking interconnection to the Administered Transmission System, in time to support such Trial Operation Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party; (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

The Interconnecting Transmission Owner or appropriate Affected Party will refund to the Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the ETU IA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that the Interconnecting Transmission Owner or appropriate Affected Party has not refunded to the Interconnection Customer. Payment by that entity with a contractual obligation to construct such Network Upgrades shall be due on the date that it would have been due had there been no request for advance construction. The Interconnecting Transmission Owner or appropriate Affected Party shall forward to the Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades

as payment in full for the outstanding balance owed to the Interconnection Customer. The Interconnecting Transmission Owner or appropriate Affected Party then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the ETU IA.

**12.2.3 Advancing Construction of Network Upgrades that are Part of the Regional System Plan of the System Operator.** An Interconnection Customer with an ETU IA, in order to maintain its Trial Operation Date, may request that Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such Trial Operation Date and (ii) would otherwise not be completed, pursuant to the Regional System Plan, in time to support such Trial Operation Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party any associated expediting costs.

**12.2.4 Amended Interconnection System Impact Study.** An Interconnection System Impact Study will be amended to determine the facilities necessary to support the requested Trial Operation Date. This amended study will include those transmission and Generating Facilities that are expected to be in service on or before the requested Trial Operation Date. The ETU IA will also be amended to reflect the results of the Amended Interconnection System Impact Study and any changes in obligations, including financial support, of the Parties.

## **SECTION 13. MISCELLANEOUS.**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information treated as confidential under the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the others prior to the execution of an ETU IA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the



Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by any Party, the other Party(ies) shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**13.1.1 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the ETU IA; or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the ETU IA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**13.1.2 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

**13.1.3 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**13.1.4 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**13.1.5 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under these procedures or its regulatory requirements.

**13.1.6 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of the ETU IA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**13.1.7 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity.

The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.

**13.1.8 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 CFR section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the ETU IP, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party(ies) to the ETU IA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules, regulations and Section 13.1.

**13.1.9** Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this ETU IP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Party’s(ies’) Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in

writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

**13.1.11** The System Operator and Interconnecting Transmission Owner shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time when Confidential Information is no longer needed.

## **13.2 Delegation of Responsibility.**

The System Operator and Interconnecting Transmission Owner, or any Affected Party may use the services of subcontractors as it deems appropriate to perform its obligations under this ETU IP. The Party using the services of a subcontractor shall remain primarily liable to the Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this ETU IP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

## **13.3 Obligation for Study Costs.**

The System Operator and the Interconnecting Transmission Owner shall charge, and the Interconnection Customer shall pay, the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to the Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. The Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefore. The System Operator and Interconnecting Transmission Owner shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed amounts in compliance herewith.

## **13.4 Third Parties Conducting Studies.**

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) the Interconnection Customer receives notice pursuant to Sections 6.3, 7.4, 8.3 or 10.3 that the System Operator or Interconnecting Transmission Owner will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) the Interconnection Customer receives neither the Interconnection Study nor a notice under Sections 6.3, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then the Interconnection Customer may request, which request will not be unreasonably denied, that the System Operator and Interconnecting Transmission Owner utilize a third party consultant reasonably acceptable to the System Operator, Interconnection Customer, Interconnecting Transmission Owner and any appropriate Affected Party, to perform such Interconnection Study under the direction of the System Operator or Interconnecting Transmission Owner as applicable. At other times, System Operator or Interconnecting Transmission Owner may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of the Interconnection Customer, or on its own volition. In all cases, use of a third party consultant shall be in accord with Article 26 of the ETU IA (Subcontractors) and limited to situations where the System Operator or Interconnecting Transmission Owner determines that doing so will help maintain or accelerate the study process for the Interconnection Customer's pending Interconnection Request and not interfere with the System Operator and Interconnecting Transmission Owner's progress on Interconnection Studies for other pending Interconnection Requests. In cases where the Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, the Interconnection Customer, System Operator and Interconnecting Transmission Owner shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. The System Operator and Interconnecting Transmission Owner shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as soon as practicable upon the Interconnection Customer's request subject to the confidentiality provision in Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. In any case, such third party contract may be entered into with the System Operator, Interconnection Customer, or Interconnecting Transmission Owner at the System Operator and Interconnecting Transmission Owner's discretion. In the case of (iii) the Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this ETU IP, Article 26 of the ETU IA (Subcontractors), and the relevant Tariff procedures and protocols as would apply if the System

Operator and Interconnecting Transmission Owner were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes.

The System Operator and Interconnecting Transmission Owner shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

### **13.5 Disputes.**

**13.5.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with the ETU IA, the ETU IP, or their performance, such Party (the “Disputing Party”) shall provide the other Party(ies) with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party’s(ies’) receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, after thirty (30) Calendar Days, then (i) in the case of disputes arising out of or in conjunction with the ETU IA, the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted ETU IA, or amendment thereto, with the Commission in accordance with Section 11.3.4, or (ii) in the case of disputes arising out of or in connection with any other matter regarding the administration of the ETU IP, the System Operator may terminate the Interconnection Request and the Interconnection Customer may seek relief pursuant to Section 206 of the Federal Power Act. Each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this Schedule 25.

**13.5.2 External Arbitration Procedures.** Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be

knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Section 13, the terms of this Section 13 shall prevail.

**13.5.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons for such decision. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the ETU IA and ETU IP and shall have no power to modify or change any provision of the ETU IA and ETU IP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**13.5.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three-member panel and one-third of any associated arbitration costs; or (2) one-third the cost of the single arbitrator jointly chosen by the Parties and one-third of any associated arbitration costs.

## **13.6 Local Furnishing Bonds.**

**13.6.1 Facilities Financed by Local Furnishing Bonds.** This provision is applicable only to interconnections associated with facilities financed for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this ETU IA and ETU IP, the Interconnecting Transmission Owner shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this ETU IA and ETU IP if the provision of such Interconnection Service would jeopardize the tax-

exempt status of any local furnishing bond(s) used to finance the Interconnecting Transmission Owner's facilities that would be used in providing such Interconnection Service.

**13.6.2 Alternative Procedures for Requesting Interconnection Service.** If the Interconnecting Transmission Owner determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such Interconnection Service, it shall advise the Interconnection Customer within thirty (30) Calendar Days of receiving notice of the Interconnection Request. The Interconnection Customer thereafter may renew its Interconnection Request using the process specified in the Tariff.



## **APPENDICES TO ETU IP**

- APPENDIX 1 INTERCONNECTION REQUEST FOR ELECTIVE TRANSMISSION UPGRADE
- APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT
- APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT
- APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT
- APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT
- APPENDIX 6 ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT

**APPENDIX 1**  
**INTERCONNECTION REQUEST**  
**FOR ELECTIVE TRANSMISSION UPGRADE**

The undersigned Interconnection Customer submits this request to interconnect its Elective Transmission Upgrade (“ETU”) to the Administered Transmission System under Schedule 25 – Elective Transmission Upgrade Interconnection Procedures (“ETU IP”) of Section II to the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”). Capitalized terms have the meanings specified in the Tariff.

---

---

**PROJECT INFORMATION**

Proposed Project Name: \_\_\_\_\_

1. Description of the ETU objective (*select one of a, b, c, d, or e*):

1. \_\_\_\_ Addition of a specific technology:

1. Type of new facility (*check all applicable*):

\_\_\_\_DC \_\_\_\_AC \_\_\_\_controllable \_\_\_\_non-controllable \_\_\_\_Other (Explain):

2. Address(es) or Location(s) of the ETU (including Town/City, County & State or a map detailing such information):

3. Location(s) of the proposed Point(s) of Interconnection and associated terminals:

**4. Transmission transfer capability, including:**

- 1. Energy transfer capability and direction(s) of flow**
- 2. Capacity transfer capability and direction(s) of flow**
- 3. Other:**

**5. Indicate whether the study should consider:**

- 1. Both directions of flow**
- 2. One direction of flow only**
- 3. Explain:**

- 2. \_\_\_\_ Modification to existing PTF, MTF or OTF that is part of or interconnected to the Administered Transmission System. Explain.**

- 3. \_\_\_\_ Specific performance objective associated with specific Generating Facility(ies)/resources:**

**1. Identify Generating Facility(ies)/resources, including Queue Positions:**

**ii) Identify the specific performance goals/objectives of the ETU (e.g., energy integration):**

4. \_\_\_\_ **Increase in transfer capability between points, including:**

1.      **Transfer points (from/to)**
2.      **Energy transfer capability increase and direction(s) of flow**
3.      **Capacity transfer capability increase and direction(s) of flow**
4.      **Other**

5. \_\_\_\_ **Other specific and clearly described discrete objective:**

6. **Projected Dates:**

1. **Commercial Operation:** \_\_\_\_\_
2. **Trial Operation:** \_\_\_\_\_
3. **In-Service:** \_\_\_\_\_

4. **This request is for (*check either Internal ETU or External ETU options*):**

1) \_\_\_\_ **An Internal ETU (*check one of i or ii*):**

1.      \_\_\_\_ **The interconnection of proposed new (*check one*):**
  1.      \_\_\_\_ **PTF;**
  2.      \_\_\_\_ **OTF or MTF.**

2. \_\_\_\_A modification to, an increase in the transmission capability of, or other specific proposed objective associated with (*check one*):

1. \_\_\_\_existing internal PTF;

2. \_\_\_\_existing internal MTF or OTF that is interconnected to the Administered Transmission System.

2) \_\_\_\_An External ETU (*check i or ii or iii and specify the other Control Area interconnecting to \_\_\_\_\_*)

1. \_\_\_\_The interconnection of proposed new (*check one*):

1. \_\_\_\_PTF;

2. \_\_\_\_ OTF or MTF.

2. \_\_\_\_A modification to, an increase in the transmission capability of, or other specific proposed objective associated with (*check one*):

1. \_\_\_\_existing external PTF

2. \_\_\_\_existing external MTF or OTF.

3. \_\_\_\_A change from NI Interconnection Service to CNI Interconnection Service for a controllable MTF or OTF (no physical change to facilities).

1. For External controllable OTF or MTF in the importing direction, applicant requests (*check one*):

1. \_\_\_\_NI Interconnection Service (i.e., energy only): \_\_\_\_ MW

2. \_\_\_\_CNI Interconnection Service (i.e., capacity and energy): \_\_\_\_ MW

1. If CNI Interconnection Service, does the Interconnection Customer request Long Lead Facility treatment? \_\_\_\_Yes or \_\_\_\_No

If yes, provide to ISO-NE, together with this Interconnection Request, the Long Lead Facility deposit and other required information as specified in Section 3.2.3 of the ETU IP, including a justification for Long Lead Facility treatment.

**3. Evidence of Site Control (*check one*):**

- a. ☐ If for CNI Interconnection Service, Site Control is included with this Interconnection Request form, as required.
- b. ☐ If for NI Interconnection Service (*check one*):
  - 1. ☐ Site Control is provided with this Interconnection Request form.
  - 2. ☐ In lieu of evidence of Site Control, a \$10,000 deposit is provided with this Interconnection Request form (refundable within the cure period as described in Section 3.3.3 of the ETU IP).
  - 3. ☐ Site Control is not provided because the proposed modification is either:
    - a) to existing MTF, OTF or PTF and by checking this option, the Interconnection Customer certifies that the proposed modification does not require additional real property, or
    - b) to PTF and the Interconnection Customer does not own such PTF.

**4. This Interconnection Customer requests (*check one*):**

- 4) ☐ An Interconnection Feasibility Study to be completed as a separate and distinct study, or
- 5) ☐ An Interconnection System Impact Study with the Feasibility Study to be performed as the first step of the study.
- 6) If seeking CNI Interconnection Service, does the Interconnection Customer request a preliminary non-binding, analysis to identify potential upgrades that may be necessary to qualify resources for participation in a Forward Capacity Auction? ☐ Yes or ☐ No

*Note: The above selection of a or b is not required as part of the initial Interconnection Request; however, the Interconnection Customer shall select either option and may revise this selection up to within five (5) Business Days following the Scoping Meeting.*

5. The ETU technical data specified within the applicable attachment to this form (*check one*):

- 1) \_\_\_\_ Is included with the submittal of this Interconnection Request.
- 2) \_\_\_\_ Will be provided on or before the execution and return of the Feasibility Study Agreement (Attachment B) or the System Impact Study Agreement (Attachment A), as applicable.

---

---

**CUSTOMER INFORMATION**

	<u>Interconnection Customer</u>	<u>Customer Representative</u>
<b>Company Name:</b>		
<b>Address:</b> (PO Box)		
(Street)		
(City, State, ZIP)		
<b>Phone:</b>		
<b>FAX:</b>		
<b>Email:</b>		

ISO Customer ID# (if available): \_\_\_\_\_

---

---

**This Interconnection Request is submitted by:**

**Authorized Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Name (type or print):** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Company:** \_\_\_\_\_

---

---

*In order for an Interconnection Request to be considered a valid request, it must:*

- (a) Be accompanied by a deposit of \$50,000.00 that is provided electronically and which may be refundable in accordance with Section 3.3.1 of the ETU IP;*
- (b) For CNI Interconnection Service, include documentation demonstrating Site Control. If for NI Interconnection Service, demonstrate Site Control or post an additional deposit of \$10,000. If the Interconnection Customer with an Interconnection Request for NI Interconnection Service demonstrates Site Control within the cure period specified in Section 3.3.3 of the ETU IP, the additional deposit of \$10,000 shall be refundable (An Interconnection Customer does not need to demonstrate Site Control for an Interconnection Request for a modification to its existing PTF, MTF or OTF facility where the Interconnection Customer has certified that it has Site Control and that the proposed modification does not require additional real property);*
- (c) Include a detailed map, such as a map of the quality produced by the U.S. Geological Survey, which clearly indicates the site of the new facility and pertinent surrounding structures;*
- (d) Include a one-line diagram of the facilities (2 copies);*
- (e) Include all information required on the Interconnection Request form and any attachments thereto; and*
- (f) Include the deposit and all information required for Long Lead Facility treatment, if such treatment is requested in accordance with Section 3.2.3 of the ETU IP.*

*In addition, within sixty (60) days of submitting an Interconnection Request to the System Operator, the Interconnection Customer with a request for an External ETU, shall provide evidence that it has submitted a valid request with the other Control Area to which it seeks to interconnect.*

---

**All Interconnection Requests must be sent to the System Operator via the Interconnection Request Tracking Tool or IRTT, a web-based application for submitting, tracking and viewing Interconnection Requests available on the ISO New England website.**

**ISO New England Inc. Use**

**Date Elective Transmission Upgrade Request Received:** \_\_\_\_\_

**Received By:** \_\_\_\_\_

☐ **Deficient**

**Date Cured:** \_\_\_\_\_

**Date Deemed Valid Application:** \_\_\_\_\_

**Deemed Valid By:** \_\_\_\_\_





Attachment A (page 1)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

**The technical data required below must be submitted no later than the date of execution of the System Impact Study Agreement pursuant to Section 7.2 of the ETU IP. Submit additional data sheets as necessary.**

**ELECTIVE TRANSMISSION UPGRADES:**

<b>GEOGRAPHIC MAP</b>
Geographic map which clearly illustrates the location of the proposed Elective Transmission Upgrade facilities and which includes the location of the proposed Point(s) of Interconnection and a specific transmission line or transmission cable route if applicable.
<b>ONE LINE DIAGRAM</b>
Detailed one-line diagram of the proposed Elective Transmission Upgrades facilities showing the connectivity between all new proposed equipment (i.e., circuit breakers, instrument transformers, surge arresters, transformers, shunt-connected capacitor banks, shunt-connected reactors, dynamic reactive power supply systems, transmission lines, etc.) and the proposed bus configuration at the Point(s) of Interconnection. Equipment grounding configuration should be depicted on the one-line (i.e., for transformers show winding and grounding arrangement)
<b>PROPOSED POINT(S) OF INTERCONNECTION</b>  <i>(include additional points as necessary)</i>
Point of Interconnection A:
Voltage Level: _____ kV
Point of Interconnection B:

Attachment A (page 2)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

Voltage Level: _____ Kv
Point of Interconnection C:
Voltage Level: _____ kV
<b>AC TRANSMISSION LINE DATA</b>  <i>(include data for segments between the POI and converter station(s) as necessary)</i>
Transmission line length: _____ Miles
AC transmission tower design illustrating tower type, conductor type, number of conductors per bundle, spacing of conductors within bundle, phase spacing between conductors or conductor bundles, and conductor or conductor bundle clearances.
Voltage level: _____ kV
Transmission line MVA base: _____ MVA
Positive sequence impedances on transmission line MVA base:  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Zero sequence impedances on transmission line MVA base):  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Line Rating: Normal/LTE/STE Rating _____ MVA / _____ MVA / _____ MVA

Attachment A (page 3)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

<b>TRANSFORMER DATA</b>  <i>(include data for converter station power transformer(s) as necessary)</i>
Transformer Rating: OA/FA/FOA Rating _____ MVA / _____ MVA / _____ MVA
Voltage Ratio: High-side/Low-side/Tertiary _____ kV / _____ kV / _____ kV
Winding Connections (Delta, Wye, or Wye-Grounded): High-side Winding / Low-side Winding / Tertiary Winding _____ / _____ / _____
Fixed or Variable Taps:
Tap Range:
Two-Winding Transformer Impedances: Positive Sequence Impedance on transformer OA MVA base: _____ % _____ X/R Zero Sequence Impedance on transformer OA MVA base: _____ % _____ X/R
Three-Winding Transformer Impedances: Positive Sequence Impedance on transformer OA MVA base Z1 <sub>H-L</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>H-T</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>L-T</sub> (on self-cooled MVA rating) _____ %, X/R _____

Attachment A (page 4)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Zero Sequence Impedance on transformer OA MVA base  $Z_{0_{H-L}}$ (on self-cooled MVA rating) _____ %, X/R _____  $Z_{0_{H-T}}$ (on self-cooled MVA rating) _____ %, X/R _____  $Z_{0_{L-T}}$ (on self-cooled MVA rating) _____ %, X/R _____
<b>FIXED OR SWITCHED SHUNT CAPACITOR BANK DATA</b>
Capacitor Bank Rating: _____ MVar
Positive sequence susceptance on capacitor bank rating base: B: _____ p.u.
Zero sequence susceptance on capacitor bank rating base: B: _____ p.u.
<b>FIXED OR SWITCHED SHUNT REACTOR DATA</b>
Nameplate Reactor Rating: _____ MVar
Positive sequence susceptance on reactor rating base: B: _____ p.u.
Zero sequence susceptance on reactor rating base: B: _____ p.u.
<b>DYNAMIC SHUNT REACTIVE SUPPLY SYSTEM</b>
Device Type (i.e., SVC, STATCOM, etc.):
Reactive power supply reference point:
Maximum leading reactive power supply capability: _____ MVar

Attachment A (page 5)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

Maximum lagging reactive power supply capability: _____ MVA <sub>r</sub>
<b>DC TRANSMISSION SYSTEMS (LINE-COMMUTATED CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW    _____ MVA
Minimum power transmission capacity: _____ MW
Maximum power transmission ramp rate: _____ MW/min
Point-to-point or back-to-back transmission:
Monopolar or bipolar transmission configuration:
Unidirectional or bidirectional power transmission: (identify rectifier station for detail to be submitted below):
Rated DC voltage: _____ kV
Rated DC current: _____ A
Power controlling converter station and real power reference location:
Converter station losses (including auxiliary power demand) at nameplate power: <div style="text-align: center; margin-top: 10px;">Rectifier: _____ kW      Inverter: _____ kW</div>
Transmission line or cable losses at nameplate power: _____ kW
Nominal rectifier firing angle (alpha): _____ deg
Nominal inverter extinction angle (gamma): _____ deg

Attachment A (page 6)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Converter station total reactive power supply (including filtering system) at nameplate active power:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVA<sub>r</sub></span> <span>Inverter: _____ MVA<sub>r</sub></span> </div>
Number of switched filter or reactive power supply devices:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____</span> <span>Inverter: _____</span> </div>
Size of largest switched filter or reactive power supply device:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVA<sub>r</sub></span> <span>Inverter: _____ MVA<sub>r</sub></span> </div>
DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.
DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.
Pole conductor resistance at maximum operating temperature: _____ ohms
DMNR conductor resistance at maximum operating temperature : _____ ohms
<b>DC TRANSMISSION SYSTEMS (VOLTAGE SOURCE CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW    _____ MVA
Point-to-point or back-to-back transmission:

Attachment A (page 7)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Transmission configuration (i.e., mono-pole, bi-pole or other):
Unidirectional or bidirectional power transmission:  (identify rectifier station for detail to be submitted below):
Maximum power transmission ramp rate: _____ MW/min
Rated DC voltage: _____ kV
Rated DC current: _____ A
Real power controlling converter and reference location:
Converter station losses (including auxiliary power demand) at nameplate power: _____ kW
Transmission line or cable losses at nameplate power: _____ kW
Passive filter size:  <div style="margin-left: 40px;">           Rectifier:      Fixed: ____MVar   Switched at de-block: ____MVar             Inverter:      Fixed: ____MVar   Switched at de-block: ____MVar         </div>
Maximum converter station leading reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:  <div style="margin-left: 40px;">           Rectifier: _____ MVar      Inverter: _____ MVar         </div>



Attachment A (page 8)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

<p>Maximum converter station lagging reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:</p> <p style="text-align: center;">Rectifier: _____ MVar      Inverter: _____ MVar</p>
<p>Provide reactive capability curve.</p>
<p>DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.</p>
<p>DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.</p>
<p>Pole conductor resistance at maximum operating temperature: _____ ohms</p>
<p><b>POWER SYSTEM SIMULATION MODELS</b></p>
<p>Completed, fully-functioning, public (<i>i.e.</i>, non-proprietary or non-confidential) Siemens PTI's ("PSS/E") power flow models or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flows ("PSLF") data sheet, must be supplied with this Attachment A. If additional public data sheets are more appropriate to the proposed device, then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.</p> <p>If a PSCAD model is deemed required at the Scoping Meeting, then the PSCAD model must be provided to the System Operator within ninety (90) Calendar Days of the executed Interconnection System Impact Study Agreement. A benchmarking analysis, consistent with the requirements in the ISO New England Planning Procedures, confirming acceptable performance of the PSS/E model in comparison to the PSCAD model, shall be provided at the time PSCAD model is submitted.</p>

<b>OTHER TRANSMISSION FACILITY DATA</b>
System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Facilities Study.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment A to the Interconnection Request is true and accurate.

For Interconnection Customer:\_\_\_\_\_ Date:\_\_\_\_\_



### **CLUSTER SYSTEM IMPACT STUDY APPLICATION FORM**

The undersigned Interconnection Customer submits this form to request the inclusion of the Interconnection Request for its Elective Transmission Upgrade in a Cluster Interconnection System Impact Study pursuant to Section 4.2.3.2.2 of this ETU IP.

To be included in a Cluster Interconnection System Impact Study, the following must be submitted together with this form to the System Operator by the Cluster Entry Deadline:

1. Project Information:

1.3 Project Name: \_\_\_\_\_

1.4 Queue Position: \_\_\_\_\_

1.5 Is the Interconnection Request contractually associated with an Interconnection Request for a Generating Facility? Yes \_\_\_\_ No \_\_\_\_

If yes, identify Queue Position of the associated Interconnection Request  
and provide evidence of the contractual commitment. Queue Position No.: \_\_\_\_

2. Initial Cluster Participation Deposit as specified in Section 4.2.3.2.2

#### **Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

Attachment B (page 1)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

**The technical data required below must be submitted no later than the date of execution of the Feasibility Study Agreement pursuant to Section 6.1 of the ETU IP. Submit additional data sheets as necessary.**

**ELECTIVE TRANSMISSION UPGRADES:**

<b>GEOGRAPHIC MAP</b>
Geographic map which clearly illustrates the location of the proposed Elective Transmission Upgrade facilities and which includes the location of the proposed Point(s) of Interconnection and a conceptual transmission line or transmission cable route if applicable.
<b>ONE LINE DIAGRAM</b>
Conceptual one-line diagram of the proposed Elective Transmission Upgrades facilities showing the connectivity between all new proposed equipment (i.e., circuit breakers, transformers, shunt-connected capacitor banks, shunt-connected reactors, dynamic reactive power supply systems, transmission lines, etc.) and the proposed bus configuration at the Point(s) of Interconnection.
<b>PROPOSED POINT(S) OF INTERCONNECTION</b> <i>(include additional points as necessary)</i>
Point of Interconnection A:
Voltage Level: _____kV
Point of Interconnection B:
Voltage Level: _____kV

Attachment B (page 2)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Point of Interconnection C:
Voltage Level: _____kV
<b>AC TRANSMISSION LINE DATA</b>  <i>(include data for segments between the POI and converter station(s) as necessary)</i>
Estimated transmission line length: _____Miles
Conceptual AC transmission tower design illustrating tower type, conductor type, number of conductors per bundle, spacing of conductors within bundle, phase spacing between conductors or conductor bundle spacing, and conductor or conductor bundle clearances.
Voltage level: _____kV
Transmission line MVA base: _____ MVA
Estimated positive sequence impedances on transmission line MVA base:  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Estimated zero sequence impedances on transmission line MVA base):  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Line Rating:  Normal/LTE/STE Rating _____ MVA / _____ MVA / _____ MVA

Attachment B (page 3)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection Feasibility Study

<b>TRANSFORMER DATA</b>  <i>(include data for converter station power transformer(s) as necessary)</i>
Estimated Transformer Rating: OA/FA/FOA Rating _____ MVA / _____ MVA / _____ MVA
Voltage Ratio: High-side/Low-side/Tertiary _____ kV / _____ kV / _____ kV
Winding Connections (Delta, Wye, or Wye-Grounded): High-side Winding / Low-side Winding / Tertiary Winding _____ / _____ / _____
Fixed or Variable Taps:
Estimated Tap Range:
Estimated Two-Winding Transformer Impedances: Positive Sequence Impedance on transformer OA MVA base: _____ % _____ X/R Zero Sequence Impedance on transformer OA MVA base: _____ % _____ X/R
Estimated Three-Winding Transformer Impedances:
Positive Sequence Impedance on transformer OA MVA base Z1 <sub>H-L</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>H-T</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>L-T</sub> (on self-cooled MVA rating) _____ %, X/R _____

Attachment B (page 4)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Zero Sequence Impedance on transformer OA MVA base  $Z_{0_{H-L}}$ (on self-cooled MVA rating) _____ %, X/R _____  $Z_{0_{H-T}}$ (on self-cooled MVA rating) _____ %, X/R _____  $Z_{0_{L-T}}$ (on self-cooled MVA rating) _____ %, X/R _____
<b>FIXED OR SWITCHED SHUNT CAPACITOR BANK DATA</b>
Capacitor Bank Rating: _____ MVA <sub>r</sub>
Estimated positive sequence susceptance on capacitor bank rating base: B: _____ p.u.
Estimated zero sequence susceptance on capacitor bank rating base: B: _____ p.u.
<b>FIXED OR SWITCHED SHUNT REACTOR DATA</b>
Nameplate Reactor Rating: _____ MVA <sub>r</sub>
Estimated positive sequence susceptance on reactor rating base: B: _____ p.u.
Estimated zero sequence susceptance on reactor rating base: B: _____ p.u.
<b>DYNAMIC SHUNT REACTIVE SUPPLY SYSTEM</b>
Device Type (i.e., SVC, STATCOM, etc.):
Reactive power supply reference point:
Maximum leading reactive power supply capability: _____ MVA <sub>r</sub>



Attachment B (page 5)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Maximum lagging reactive power supply capability: _____ MVar
<b>DC TRANSMISSION SYSTEMS (LINE-COMMUTATED CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW    _____ MVA
Minimum power transmission capacity: _____ MW
Maximum power transmission ramp rate: _____ MW/min
Point-to-point or back-to-back transmission:
Monopolar or bipolar transmission configuration:
Unidirectional or bidirectional power transmission: (identify rectifier station for detail to be submitted below):
Rated DC voltage: _____ kV
Rated DC current: _____ A
Power controlling converter station and real power reference location:
Estimated converter station losses (including auxiliary power demand) at nameplate power:  Rectifier: _____ kW  Inverter: _____ kW
Estimated transmission line or cable losses at nameplate power: _____ kW
Nominal rectifier firing angle (alpha): _____ deg

Attachment B (page 6)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection Feasibility Study

Nominal inverter extinction angle (gamma): _____ deg
Estimated converter station total reactive power supply (including filtering system) at nameplate active power:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVA</span> <span>Inverter: _____ MVA</span> </div>
Estimated number of switched filter or reactive power supply devices:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____</span> <span>Inverter: _____</span> </div>
Estimated size of largest switched filter or reactive power supply device:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVA</span> <span>Inverter: _____ MVA</span> </div>
Conceptual DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.
Conceptual DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.
Estimated pole conductor resistance at maximum operating temperature: _____ ohms
Estimated DMNR conductor resistance at maximum operating temperature : _____ ohms
<b>DC TRANSMISSION SYSTEMS (VOLTAGE SOURCE CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW    _____ MVA
Point-to-point or back-to-back transmission:

Attachment B (page 7)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Transmission configuration (i.e., mono-pole, bi-pole or other):
Unidirectional or bidirectional power transmission:  (identify rectifier station for detail to be submitted below):
Maximum power transmission ramp rate: _____MW/min
Rated DC voltage: _____ kV
Rated DC current: _____ A
Real power controlling converter and reference location:
Estimated converter station losses (including auxiliary power demand) at nameplate power: _____ kW
Estimated transmission line or cable losses at nameplate power: _____kW
Estimated passive filter size:  <div style="display: flex; justify-content: space-between;"> <div>Rectifier:</div> <div>Fixed: ____MVA<sub>r</sub>   Switched at de-block: ____MVA<sub>r</sub></div> </div> <div style="display: flex; justify-content: space-between;"> <div>Inverter:</div> <div>Fixed: ____MVA<sub>r</sub>   Switched at de-block: ____MVA<sub>r</sub></div> </div>
Estimated maximum converter station leading reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:  <div style="display: flex; justify-content: space-between;"> <div>Rectifier:_____ MVA<sub>r</sub></div> <div>Inverter:_____ MVA<sub>r</sub></div> </div>

Attachment B (page 8)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection Feasibility Study

<p>Estimated maximum converter station lagging reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:</p> <p style="text-align: center;">Rectifier:_____ MVar      Inverter:_____ MVar</p>
<p>Provide reactive capability curve.</p>
<p>Conceptual DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.</p>
<p>Conceptual DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.</p>
<p>Estimated pole conductor resistance at maximum operating temperature: _____ ohms</p>
<p><b>POWER SYSTEM SIMULATION MODELS</b></p>
<p>Completed, fully-functioning, public (<i>i.e.</i>, non-proprietary or non-confidential) Siemens PTI's PSS/E power flow models or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flows ("PSLF") data sheet, must be supplied with this Attachment A. If additional public data sheets are more appropriate to the proposed device, then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.</p>
<p><b>OTHER TRANSMISSION FACILITY DATA</b></p>

System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment B to the Interconnection Request is true and accurate.

For Interconnection Customer:\_\_\_\_\_ Date:\_\_\_\_\_

**APPENDIX 2**  
**INTERCONNECTION FEASIBILITY STUDY AGREEMENT**

THIS AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Elective Transmission Upgrade to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner(s) to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Elective Transmission Upgrade to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade

Interconnection Procedures (“ETU IP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).

- 2.0 Interconnection Customer elects and System Operator shall cause to be performed an Interconnection Feasibility Study consistent with Section 6.0 of the ETU IP in accordance with the Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in Attachment B to the Interconnection Request, as may be modified as the result of the Scoping Meeting. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 3.3.4 of the ETU IP. If, after the designation of the Point of Interconnection pursuant to Section 3.3.4 of the ETU IP, Interconnection Customer modifies its Interconnection Request pursuant to Section 4.4, the time to complete the Interconnection Feasibility Study may be extended.
- 5.0 The Interconnection Feasibility Study report shall provide the following information depending on whether the Feasibility Study consisted of (a) a power flow, including thermal analysis and voltage analysis, and short circuit analysis, or (b) limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade’s interconnection given recent study experience and as discussed at the Scoping Meeting:
  - preliminary identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection, or, findings of the limited thermal analysis, voltage analysis, short circuit analysis, stability

analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade's interconnection given recent study experience and as discussed at the Scoping Meeting;

- preliminary identification of any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade's interconnection given recent study experience and as discussed at the Scoping Meeting;
- preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Elective Transmission Upgrade as identified within the scope of the analysis performed as part of the study;
- If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, initial review of grounding requirements and electric system protection;
- If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, preliminary description and non-binding estimated cost of and the time to construct the facilities required to interconnect the Elective Transmission Upgrade to the Administered Transmission System and to address the identified short circuit and power flow issues; and
- to the extent the Interconnection Customer requested a preliminary analysis as described in this Section 6.2 of the ETU IP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

In accordance with the ETU IP, in performing the Interconnection Feasibility Study, System Operator and Interconnecting Transmission Owner shall coordinate with each other and Affected Parties, and shall receive and



incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study and the development of this Interconnection Feasibility Study Agreement and its attachment(s). Interconnecting Transmission Owner's and System Operator's good faith estimate for the time of completion of the Interconnection Feasibility Study Agreement is [insert date].

The total estimated cost of the performance of the Interconnection Feasibility Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection Feasibility Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Feasibility Study System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study.

Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

- 7.0 Miscellaneous.

- 7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Feasibility Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Feasibility Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Feasibility Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Feasibility Study, the content of the Interconnection Feasibility Study, or the conclusions of the Interconnection Feasibility Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or an Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or an Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties

arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Feasibility Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Feasibility Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing

written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.

- 7.6 **Governing Law.** This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 7.7 **Severability.** In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 **Counterparts.** This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 **Amendment.** No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 **Survival.** All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11 **Independent Contractor.** Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 **No Implied Waivers.** The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.

- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION FEASIBILITY STUDY**

The Interconnection Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]



**APPENDIX 3**  
**INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Elective Transmission Upgrade to the Administered Transmission System;

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection Feasibility Study (the “Feasibility Study”) and provided the results of said study to the Interconnection Customer, or Interconnection Customer has requested that the Feasibility Study be completed as part of the System Impact Study pursuant to Section 6.1 of the ETU IP, or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”)(This recital is to be omitted if Interconnection Customer has elected to forego the Interconnection Feasibility Study); and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection System Impact Study to assess the impact of interconnecting the Elective Transmission Upgrade to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade Interconnection Procedure (“ETU IP”).
- 2.0 Interconnection Customer elects and System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection System Impact Study consistent with Section 7.0 of the ETU IP in accordance with the Tariff.
- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, whether performed separately or as part of the Interconnection System Impact Study, and the technical information provided by Interconnection Customer in Attachment A to the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the ETU IP. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
  - identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection;

- identification of any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection;
- initial review of grounding requirements and electric system protection;
- identification of any instability or inadequately damped response to system disturbances resulting from the interconnection;
- description and non-binding, good faith estimated cost of and the time to construct the facilities required to interconnect the Elective Transmission Upgrade to the Administered Transmission System and to address the identified short circuit, instability, and power flow issues; and
- to the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.4 of the ETU IP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

6.0 The Interconnection Customer is providing a deposit equal to the greater of 100 percent of the estimated cost of the Interconnection System Impact Study or \$250,000.

The deposit shall be applied toward the cost of the Interconnection System Impact Study and the development of this Interconnection System Impact Study Agreement and its attachment(s) and the ETU IA. Interconnecting Transmission Owner's and System Operator's good faith estimate for the times of commencement and completion of the Interconnection System Impact Study is [insert dates].

The total estimated cost of the performance of the Interconnection System Impact Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection System Impact Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study.

System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study each month.

Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

In accordance with the ETU IP, in performing the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

#### 7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection System Impact Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the

Interconnection System Impact Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection System Impact Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection System Impact Study, the content of the Interconnection System Impact Study, or the conclusions of the Interconnection System Impact Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not

be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, an Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or

willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection System Impact Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection System Impact Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.

- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.



7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION SYSTEM IMPACT STUDY**

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, whether performed separately or as part of the Interconnection System Impact Study, subject to any modifications in accordance with Section 4.4 of the ETU IP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]

**APPENDIX 4**  
**INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_ ; and

**WHEREAS**, Interconnection Customer desires to interconnect the Elective Transmission Upgrade to the Administered Transmission System; and

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection System Impact Study (the “System Impact Study”) and provided the results of said study to the Interconnection Customer; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Elective Transmission Upgrade to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade Interconnection Procedures (“ETU IP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 Interconnection Customer elects and System Operator shall cause an Interconnection Facilities Study consistent with Section 8.0 of the ETU IP to be performed in accordance with the Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), and schedule for required facilities to interconnect the Elective Transmission Upgrade to the Administered Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 The Interconnection Customer is providing a deposit equal to the greater of 25 percent of the estimated cost of the Interconnection Facilities Study or \$250,000.

The deposit shall be applied toward the cost of the Interconnection Facilities Study and the development of this Interconnection Facilities Study Agreement and its attachment(s) and the ETU IA. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

The total estimated cost of the performance of the Interconnection Facilities Study consists of \$\_\_\_\_\_ which is comprised of the System Operator’s estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner’s estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Facilities Study, System Operator and Interconnecting Transmission Owner shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study. System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

In accordance with the ETU IP, in performing the Interconnection Facilities Study, Interconnecting Transmission Owner and System Operator shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

6.0 Miscellaneous.

6.1 Accuracy of Information. Except as a Party (“Providing Party”) may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

6.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Facilities Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Facilities Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Facilities Study), as applicable, no Party nor any subcontractor consultant

employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Facilities Study, the content of the Interconnection Facilities Study, or the conclusions of the Interconnection Facilities Study.

Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 6.3 Force Majeure, Liability and Indemnification.

6.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

6.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or

omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 6.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by



Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 6.4 Third-Party Beneficiaries. Without limiting Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Facilities Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 6.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Facilities Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 6.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 6.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed

severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.

- 6.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 6.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 6.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 6.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 6.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 6.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 6.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations

hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By:\_\_\_\_\_

By:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_

Date:\_\_\_\_\_

Date:\_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By:\_\_\_\_\_

By:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_

Date:\_\_\_\_\_

Date:\_\_\_\_\_

**INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE  
INTERCONNECTION FACILITIES STUDY**

Interconnection Customer elects (check one):

- b. +/- 20 percent cost estimate contained in the Interconnection Facilities Study report.
- c. +/- 10 percent cost estimate contained in the Interconnection Facilities Study report.

Interconnecting Transmission Owner and System Operator shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to the Interconnection Customer within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:

- ninety (90) Calendar Days with no more than a +/- 20 percent cost estimate contained in the report, or
- one hundred eighty (180) Calendar Days with no more than a +/- 10 percent cost estimate contained in the report.

**DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER  
WITH THE  
INTERCONNECTION FACILITIES STUDY AGREEMENT**

Provide location plan and simplified one-line diagram of the Elective Transmission Upgrade, including terminal facilities. For staged projects, please indicate future equipment, etc.

One set of metering is required for each ETU connection to the new ring bus or existing New England Transmission System station. Number of connections:

On the one line indicate the required capacity attached at each metering location. (Maximum load on Current Transformer/Power Transformer (“CT/PT”))

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the ETU side of the metering require that each meter set be designed for the total ETU capacity? Yes \_\_\_\_\_ No \_\_\_\_\_

(Please indicate on one line).

What type of control system or Power Line Carrier (“PLC”) will be located at the Interconnection Customer’s ETU?

What protocol does the control system or PLC use?

Attachment B (page 2)  
Appendix 4  
Interconnection Facilities  
Study Agreement

Please provide a 7.5-minute quadrangle of the site. Sketch the facility, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from facility to interconnection station:

Line length from interconnection station to Interconnecting Transmission Owner's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with System Operator and Interconnecting Transmission Owner.

Is the ETU in Interconnecting Transmission Owner's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ Local provider:

Please provide proposed schedule dates:

Begin Construction Date:

Trial Operation Date:

Commercial Operation Date:





**APPENDIX 5**  
**OPTIONAL INTERCONNECTION STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer is proposing to establish an interconnection to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has submitted to System Operator an Interconnection Request; and

**WHEREAS**, on or after the date when the Interconnection Customer receives the Interconnection System Impact Study results, Interconnection Customer has further requested that the System Operator and Interconnecting Transmission Owner prepare an Optional Interconnection Study.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade Interconnection Procedures (“ETU IP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 Interconnection Customer elects and System Operator shall cause an Optional Interconnection Study consistent with Section 10.0 of the ETU IP to be performed in accordance with the Tariff.
- 3.0 The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Optional Interconnection Study shall be performed solely for informational purposes.
- 5.0 The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify Interconnecting Transmission Owner’s Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the assumptions specified by the Interconnection Customer in Attachment A.  
  
In accordance with the ETU IP, in performing the Optional Interconnection Study, the System Operator shall coordinate with Interconnecting Transmission Owner and Affected Parties, and shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.
- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. Interconnecting Transmission Owner’s and System Operator’s good faith estimate for the time of completion of the Optional Interconnection Study is [insert date].

The total estimated cost of the performance of the Optional Interconnection Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the initial payment and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate. Upon receipt of the Optional Interconnection Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Optional Interconnection Study. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of invoice.

7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Optional Interconnection Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Optional Interconnection Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Optional Interconnection Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the

information considered in conducting the Optional Interconnection Study, the content of the Optional Interconnection Study, or the conclusions of the Optional Interconnection Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System

Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owners under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the

indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Optional Interconnection Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Optional Interconnection Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located, without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.

- 7.9      Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10     Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11     Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12     No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instances; rather, the same shall be and remain in full force and effect.
- 7.13     Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14     Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By:\_\_\_\_\_

By:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_

Date:\_\_\_\_\_

Date:\_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By:\_\_\_\_\_

By:\_\_\_\_\_

Title:\_\_\_\_\_

Title:\_\_\_\_\_

Date:\_\_\_\_\_

Date:\_\_\_\_\_



Attachment A

Appendix 5

Optional Interconnection

Study Agreement

**ASSUMPTIONS USED IN CONDUCTING  
THE OPTIONAL INTERCONNECTION STUDY**

[To be completed by Interconnection Customer consistent with Section 10 of the ETU IP.]

**APPENDIX 6**  
**ELECTIVE TRANSMISSION UPGRADE**  
**INTERCONNECTION AGREEMENT**

**TABLE OF CONTENTS**

Article 1	Definitions
Article 2	Effective Date, Term and Termination
Article 3	Regulatory Filings
Article 4	Scope of Service
Article 5	Interconnection Facilities Engineering, Procurement, and Construction
Article 6	Testing and Inspection
Article 7	Metering
Article 8	Communications
Article 9	Operations
Article 10	Maintenance
Article 11	Performance Obligation
Article 12	Invoice
Article 13	Emergencies
Article 14	Regulatory Requirements and Governing Law
Article 15	Notices
Article 16	Force Majeure
Article 17	Default
Article 18	Indemnity, Consequential Damages and Insurance
Article 19	Assignment
Article 20	Severability
Article 21	Comparability
Article 22	Confidentiality
Article 23	Environmental Releases
Article 24	Information Requirements
Article 25	Information Access and Audit Rights
Article 26	Subcontractors

Article 27	Disputes
Article 28	Representations, Warranties and Covenants
Article 29	Omitted
Article 30	Miscellaneous

## **THIS ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT**

(“Agreement”) is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Interconnection Customer” with an Elective Transmission Upgrade Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Under this Agreement the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a “Party” or collectively as the “Parties.”

### **RECITALS**

**WHEREAS**, System Operator is the central dispatching agency provided for under the Transmission Operating Agreement (“TOA”) which has responsibility for the operation of the New England Control Area from the System Operator control center and the administration of the Tariff; and

**WHEREAS**, Interconnecting Transmission Owner is the owner or possessor of an interest in the Administered Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Elective Transmission Upgrade identified in Appendix C to this Agreement; and

**WHEREAS**, System Operator, Interconnection Customer and Interconnecting Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the Elective Transmission Upgrade to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this Elective Transmission Upgrade Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

## ARTICLE 1. DEFINITIONS

The definitions contained in this Article 1 and those definitions embedded in an Article of this Agreement are intended to apply in the context of the Elective Transmission Upgrade interconnection process provided for in Schedule 25 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of Elective Transmission Upgrade interconnections under Schedule 25. Capitalized terms in Schedule 25 that are not defined in this Article 1 shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF, and the Non-PTF, ~~and distribution facilities that are subject to the Tariff.~~

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**Base Case** shall have the meaning specified in Section 2.3.

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability databases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Elective Transmission Upgrade Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Elective Transmission Upgrade Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resource or Elective

Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Import Capability (“CNI Capability”)** shall mean the MW quantity associated with CNI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Import Interconnection Service (“CNI Interconnection Service”)** shall mean, for an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s Capacity Network Import Interconnection Service shall be for the megawatt of Capacity Network Import Capability. Capacity Network Import Interconnection Service does not in and of itself convey transmission service.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of an ETU Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of an Elective Transmission Upgrade that has commenced transmitting electricity, excluding performance during Trial Operation.

**Commercial Operation Date** shall mean the date on which the Elective Transmission Upgrade commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Elective Transmission Upgrade Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise. Confidential Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Elective Transmission Upgrade Interconnection Agreement.



**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Elective Transmission Upgrade. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Elective Transmission Upgrade Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Elective Transmission Upgrade ("ETU")** shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.

**Elective Transmission Upgrade Interconnection Agreement ("ETU IA")** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade, that is included in this Schedule 25 to Section II of the Tariff.

**Elective Transmission Upgrade Interconnection Procedures (“ETU IP”)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade that are included in this Schedule 25 to Section II of the Tariff.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, Interconnecting Transmission Owner’s Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Elective Transmission Upgrade or Interconnection Customer’s Interconnection Facilities.

**Engineering & Procurement (“E&P”) Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**External Elective Transmission Upgrade (“External ETU”)** shall mean an Elective Transmission Upgrade that interconnects the New England Control Area with another Control Area.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party’s control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of Section II to the Tariff.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities.

**Interconnecting Transmission Owner** shall mean Transmission Owner that owns, leases or otherwise possesses an interest in the portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Elective Transmission Upgrade Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator, and may refer to one or more Transmission Owners in the case of an Internal Elective Transmission Upgrade.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole

use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Elective Transmission Upgrade with the Administered Transmission System under the Elective Transmission Upgrade Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Elective Transmission Upgrade Interconnection Agreement, that are separate and distinct from the Elective Transmission Upgrade and are located between the Elective Transmission Upgrade and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Elective Transmission Upgrade and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Elective Transmission Upgrade with the Administered Transmission System. The scope of the study is defined in Section 8 of the Elective Transmission Upgrade Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Elective Transmission Upgrade to the Administered Transmission System, the scope of which is described in Section 6 of the Elective Transmission Upgrade Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Elective Transmission Upgrade Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Elective Transmission Upgrade to the Administered Transmission System; (ii) make a Material Modification to an Elective Transmission upgrade with an outstanding Interconnection Request; (iii) increase the capability of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System; (iv) make a Material Modification to the design or operating characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected with the Administered Transmission System ; or (v) change from NI Interconnection Service to CNI Interconnection Service for an Elective Transmission Upgrade that is eligible to request such services.

Interconnection Request shall not include a request to interconnect to a transmission facility that is not part of the Administered Transmission System.

**Interconnection Service** shall mean the right to interconnect the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System at the Point of Interconnection pursuant to the terms of the Elective Transmission Upgrade Interconnection Agreement and, if applicable, the Tariff. For an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, Interconnection Service shall include Capacity Network Import Interconnection Service or Network Import Interconnection Service.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional Interconnection Study described in the Elective Transmission Upgrade Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to Elective Transmission Upgrade Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection of an Elective Transmission Upgrade on the safety and reliability of the Administered Transmission System and any other Affected System. The study shall identify and detail the system impacts that would result if the Elective Transmission Upgrade were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Elective Transmission Upgrade Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be

responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection System Impact Study.

**Internal Elective Transmission Upgrade (“Internal ETU”)** shall mean an Elective Transmission Upgrade that interconnects solely within the New England Control Area.

**IRS** shall mean the Internal Revenue Service.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff, respectively,

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party’s performance, or non-performance of its obligations under the Elective Transmission Upgrade Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2.2(a) of the Tariff.

**Material Modification** shall mean: (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer, that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a

material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Trial Operation Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer's control; (iv) except as provided in Section 3.2.3.4, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed pursuant to the Elective Transmission Upgrade Interconnection Agreement, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard ("NC Interconnection Standard")** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Import Capability ("NI Capability")** shall mean the MW quantity associated with NI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Import Interconnection Service ("NI Interconnection Service")** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade to the Administered Transmission System in accordance with the Network



Capability Interconnection Standard. An Interconnection Customer's Network Import Interconnection Service shall be solely for the megawatt amount of the Network Import Capability. Network Import Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Elective Transmission Upgrade to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Elective Transmission Upgrade Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities connect to the Interconnecting Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point(s), as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time

of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a “higher-queued” Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as “lower-queued.”

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Elective Transmission Upgrade Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property

where the Elective Transmission Upgrade's terminal locations will be located at the Point of Interconnection within the New England Control Area.

**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Elective Transmission Upgrade Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this ETU IP.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or other electrical disturbances occurring at the Elective Transmission Upgrade and (2) the Elective Transmission Upgrade from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Elective Transmission Upgrade prior to Commercial Operation.

**Trial Operation Date** shall mean the date upon which the Elective Transmission Upgrade begins Trial Operation.

## **ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION**

**2.1 Effective Date.** This ETU IA shall become effective upon execution by the Parties subject to acceptance by the Commission (if applicable), or if filed unexecuted, upon the date specified by the Commission. System Operator and Interconnecting Transmission Owner, shall promptly and

jointly file this ETU IA with the Commission upon execution in accordance with Section 11.3 of the ETU IP and Article 3.1, if required.

**2.2 Term of Agreement.** This ETU IA, subject to the provisions of Article 2.3, and by mutual agreement of the Parties, shall remain in effect for a period of \_\_\_\_\_ years from the Effective Date (*term to be specified in individual Agreement, but in no case should the term be less than ten (10) years from the Effective Date or such other longer period as the Interconnection Customer may request*) and shall be automatically renewed for each successive one-year period thereafter.

**2.3 Termination Procedures.**

**2.3.1 Written Notice.** This ETU IA may be terminated by the Interconnection Customer, subject to continuing obligations of this ETU IA and the Tariff, after giving the System Operator and Interconnecting Transmission Owner ninety (90) Calendar Days advance written notice, or by System Operator or Interconnecting Transmission Owner notifying the Commission after the Elective Transmission Upgrade retires pursuant to the Tariff, provided that if an Interconnection Customer exercises its right to terminate on ninety (90) Calendar Days, any reconnection would be treated as a new interconnection request; or this ETU IA may be terminated by Interconnecting Transmission Owner or System Operator by notifying the Commission after the Elective Transmission Upgrade permanently ceases Commercial Operation.

**2.3.2 Default.** Each Party may terminate this ETU IA in accordance with Article 17. Notwithstanding Articles 2.3.1 and 2.3.2, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing, if applicable, with the Commission of a notice of termination of this ETU IA, which notice has been accepted for filing by the Commission. Termination of the ETU IA shall not supersede or alter any requirements for deactivation or retirement of an Elective Transmission Upgrade under ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**2.4 Termination Costs.** If a Party elects to terminate this ETU IA pursuant to Article 2.3 above, each Party shall pay all costs incurred (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by the other Party(ies), as of the date of such Party's(ies') receipt of such notice of termination, that are the responsibility of such Party(ies) under this ETU IA. In the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this ETU IA, unless otherwise ordered or approved by the Commission:

2.4.1 With respect to any portion of the Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades to the extent covered by this ETU IA, that have not yet been constructed or installed, the Interconnecting Transmission Owner shall to the extent possible and with Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event Interconnection Customer elects not to authorize such cancellation, Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Interconnecting Transmission Owner shall deliver such material and equipment, and, if necessary, and to the extent possible, assign such contracts, to Interconnection Customer as soon as practicable, at Interconnection Customer's expense. To the extent that Interconnection Customer has already paid Interconnecting Transmission Owner for any or all such costs of materials or equipment not taken by Interconnection Customer, either (i) in the case of overpayment, Interconnecting Transmission Owner shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by the Interconnecting Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts, or (ii) in the case of underpayment, Interconnection Customer shall promptly pay such amounts still due plus any costs, including penalties incurred by Interconnecting Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this ETU IA, it shall be responsible for all costs incurred in association with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection

Facilities and equipment, and other expenses including any Network Upgrades for which the Interconnecting Transmission Owner has incurred expenses and has not been reimbursed by the Interconnection Customer.

2.4.2 Interconnecting Transmission Owner may, at its option, retain any portion of such materials, equipment, or facilities that Interconnection Customer chooses not to accept delivery of, in which case Interconnecting Transmission Owner shall be responsible for all costs associated with procuring such materials, equipment, or facilities.

2.4.3 With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this ETU IA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.

**2.5 Disconnection.** Upon termination of this ETU IA, Interconnection Service shall terminate and, the Parties will take all appropriate steps to disconnect the Elective Transmission Upgrade from the Interconnecting Transmission Owner's Interconnection Facilities. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from a non-terminating Party's Default of this ETU IA or such non-terminating Party otherwise is responsible for these costs under this ETU IA.

**2.6 Survival.** This ETU IA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this ETU IA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this ETU IA was in effect; and to permit each Party to have access to the lands of the other Party(ies) pursuant to this ETU IA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **ARTICLE 3. REGULATORY FILINGS**

- 3.1 Filing.** The System Operator and Interconnecting Transmission Owner shall jointly file this ETU IA (and any amendment hereto) with the appropriate Governmental Authority, if required, in accordance with Section 11.3 of the ETU IP. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this ETU IA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the System Operator and Interconnecting Transmission Owner with respect to such filing and to provide any information reasonably requested by the System Operator and/or the Interconnecting Transmission Owner needed to comply with applicable regulatory requirements.

#### **ARTICLE 4. SCOPE OF SERVICE**

- 4.1 Interconnection Product Options.** Interconnection Customer with an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility (import direction) has selected the following (checked) type(s) of Interconnection Service:

Check: ☐ NI Interconnection Service (NI Capability Only)

☐ CNI Interconnection Service (CNI Capability and NI Capability)

**4.1.1 Capacity Network Import Interconnection Service (CNI Interconnection Service).**

**4.1.1.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and the Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility under the CC Interconnection Standard. CNI Interconnection Service allows the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility to enable the participation of an Import Capacity Resource in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up

to the net CNI Capability, or as otherwise provided in Market Rule 1, Section III of the Tariff.

#### **4.1.2 Network Import Interconnection Service (NI Interconnection Service).**

**4.1.2.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility under the NC Interconnection Standard.

NI Interconnection Service allows the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the NI Capability or as otherwise provided in Market Rule 1, Section III of the Tariff. Notwithstanding the above, the portion of an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility that has been interconnected under the NC Interconnection Standard cannot be used to support an Import Capacity Resource's(s') participation in the Forward Capacity Market under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNI Interconnection Service.

**4.2 Provision of Service.** System Operator and Interconnecting Transmission Owner shall provide Interconnection Service for the Elective Transmission Upgrade at the Point of Interconnection.

**4.3 Performance Standards.** Each Party shall perform all of its obligations under this ETU IA in accordance with Applicable Laws and Regulations, the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such requirements and standards, such Party shall not be deemed to be in Breach of this ETU IA for its compliance therewith. If such Party is the Interconnecting Transmission Owner, then that Party shall amend



the ETU IA and System Operator, in conjunction with the Interconnecting Transmission Owner, shall submit the amendment to the Commission for approval.

**4.4 No Transmission Delivery Service.** The execution of this ETU IA does not constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service, or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

**4.5 Transmission Delivery Service Implications.** Interconnection Service allows the Interconnection Customer's Elective Transmission Upgrade to be interconnected to the Administered Transmission System. Although Interconnection Service does not convey a reservation of transmission service, any Network Customer can utilize its network service under the Tariff to obtain delivery of capability from the Interconnection Customer's Elective Transmission Upgrade. An Elective Transmission Upgrade may also be used to provide Ancillary Services, in accordance with the Tariff, after technical studies and/or periodic analyses are performed with respect to the Elective Transmission Upgrade's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Elective Transmission Upgrade. However, an Interconnection Customer's Elective Transmission Upgrade cannot be required to provide Ancillary Services except to the extent such requirements extend to all Elective Transmission Upgrades that are similarly situated.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver electricity to any particular load on the New England Transmission System without incurring congestion costs. In the event of transmission constraints on the New England Transmission System, the Interconnection Customer's Elective Transmission Upgrade shall be subject to the applicable congestion management procedures for the New England Transmission System.

Once an Interconnection Customer satisfies the requirements for obtaining Interconnection Service, as long as the Elective Transmission Upgrade has not been deemed to be retired, any future transmission service request for delivery of electricity from the Elective Transmission Upgrade to the New England Transmission System of any amount of capacity capability and/or energy capability will not require that any additional studies be performed or that any further upgrades associated with such Elective Transmission Upgrade be undertaken, and regardless of changes in ownership of the Elective Transmission Upgrade. To the extent the Interconnection Customer enters into an arrangement for long-term transmission service for deliveries from the Elective Transmission Upgrade outside the New England Transmission System, or if the Elective Transmission Upgrade has been deemed to be retired, such request may require additional studies and upgrades in order for Interconnecting Transmission Owner to grant such request.

- 4.6 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this ETU IA are set forth in Article 9.6 and Article 13.4. Interconnection Customer shall be paid for such services in accordance with Article 11.6.

## **ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION**

**5.1 Options.** Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall specify the In-Service Date, Trial Operation Date, and Commercial Operation Date as specified in the Interconnection Request or as subsequently revised pursuant to Section 4.4 of the ETU IP; and select either Standard Option or Alternate Option set forth below for completion of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as set forth in Appendix A, and such dates and selected option shall be set forth in Appendix B (Milestones). In accordance with Section 8 of the ETU IP and unless otherwise mutually agreed, the Alternate Option is not an available option if the Interconnection Customer waived the Interconnection Facilities Study.

**5.1.1 Standard Option.** The Interconnecting Transmission Owner shall design, procure, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B (Milestones). The Interconnecting Transmission Owner shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Interconnecting Transmission Owner reasonably expects that it will not be able to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the specified dates, the Interconnecting Transmission Owner shall promptly provide written notice to the Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by Interconnection Customer are acceptable to Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities by the designated dates.

If Interconnecting Transmission Owner subsequently fails to complete Interconnecting Transmission Owner's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Trial Operation Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B (Milestones); Interconnecting Transmission Owner shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each day that the applicable System Operator refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** If the dates designated by Interconnection Customer are not acceptable to Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2. The System Operator, Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by System Operator in accordance with applicable codes of conduct and confidentiality requirements must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to the ETU IA. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** If the Interconnection Customer elects not to exercise its option under Article 5.1.3 (Option to Build), Interconnection Customer shall so notify Interconnecting Transmission Owner within thirty (30) Calendar Days, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Interconnecting Transmission Owner's

Interconnection Facilities and Stand Alone Network Upgrades by Interconnection Customer) pursuant to which Interconnecting Transmission Owner is responsible for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, Interconnecting Transmission Owner shall assume responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades pursuant to 5.1.1 (Standard Option).

**5.2 General Conditions Applicable to Option to Build.** If Interconnection Customer assumes responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades,

- (1) the Interconnection Customer shall engineer, procure equipment, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Interconnecting Transmission Owner;
- (2) Interconnection Customer's engineering, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Interconnecting Transmission Owner would be subject in the engineering, procurement or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (3) Interconnecting Transmission Owner shall review and approve the engineering design, equipment acceptance tests, and the construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (4) prior to commencement of construction, Interconnection Customer shall provide to Interconnecting Transmission Owner a schedule for construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from Interconnecting Transmission Owner;

(5) at any time during construction, Interconnecting Transmission Owner shall have the right to gain unrestricted access to the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Interconnecting Transmission Owner, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(7) the Interconnection Customer shall indemnify the Interconnecting Transmission Owner for claims arising from the Interconnection Customer's construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 (Indemnity);

(8) the Interconnection Customer shall transfer control of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the Interconnecting Transmission Owner;

(9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner;

(10) Interconnecting Transmission Owner shall approve and accept for operation and maintenance the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) Interconnection Customer shall deliver to Interconnecting Transmission Owner "as built" drawings, information, and any other documents that are reasonably required by Interconnecting

Transmission Owner to assure that the Interconnection Facilities and Stand Alone Network Upgrades are built to the standards and specifications required by Interconnecting Transmission Owner.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Interconnecting Transmission Owner pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Interconnecting Transmission Owner to the Interconnection Customer in the event that Interconnecting Transmission Owner does not complete any portion of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, in the aggregate, for which Interconnecting Transmission Owner has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades for which the Interconnecting Transmission Owner has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Interconnecting Transmission Owner to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this ETU IA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Interconnecting Transmission Owner's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to transmit power from the Elective Transmission Upgrade on the specified dates, unless the Interconnection Customer would have been able to

commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to transmit power from the Elective Transmission Upgrade, but for Interconnecting Transmission Owner's delay; (2) the Interconnecting Transmission Owner's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other Interconnection Customer who has entered into an ETU IA with the Interconnecting Transmission Owner or any cause beyond Interconnecting Transmission Owner's reasonable control or reasonable ability to cure, including, but not limited to, actions by the System Operator that cause delays and/or delays in licensing, permitting or consents where the Interconnecting Transmission Owner has pursued such licenses, permits or consents in good faith; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

**5.4 Power System Stabilizers.** If a Power System Stabilizer or other frequency damping control equipment is required to be installed on the Elective Transmission Upgrade for the purpose of maintaining system stability, the Interconnection Customer shall procure, install, maintain and operate such equipment in accordance with the guidelines and procedures established by the System Operator and Interconnecting Transmission Owner, and consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator and Interconnecting Transmission Owner reserve the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers or other frequency damping control equipment, subject to the design and operating limitations of the Elective Transmission Upgrade. If the Elective Transmission Upgrade's Power System Stabilizers or other frequency damping control equipment are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the System Operator and Interconnecting Transmission Owner, or their designated representative.

**5.5 Equipment Procurement.** If responsibility for construction of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades is to be borne by the Interconnecting Transmission Owner, then the Interconnecting Transmission Owner shall commence design of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades and



procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The Interconnecting Transmission Owner has completed the Facilities Study pursuant to the Facilities Study Agreement;

**5.5.2** The Interconnecting Transmission Owner has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B (Milestones); and

**5.5.3** The Interconnection Customer has provided security to the Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).

**5.6 Construction Commencement.** The Interconnecting Transmission Owner shall commence construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

**5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades;

**5.6.3** The Interconnecting Transmission Owner has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B (Milestones); and

**5.6.4** The Interconnection Customer has provided security to Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).

**5.7 Work Progress.** The Interconnection Customer and the Interconnecting Transmission Owner shall keep each Party informed, by written quarterly progress reports, as to the progress of their respective design, procurement and construction efforts in order to meet the dates specified in Appendix B (Milestones). Any Party may also, at any other time, request a written progress report from the other Parties. If, at any time, the Interconnection Customer determines that the completion of the Interconnecting Transmission Owner's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer, upon the System Operator's approval that the change in the In-Service Date will not constitute a Material Modification pursuant to Section 4.4 of the ETU IP, will provide written notice to the Interconnecting Transmission Owner of such later date upon which the completion of the Interconnecting Transmission Owner's Interconnection Facilities will be required.

**5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with the New England Transmission System, and shall work diligently and in good faith to make any necessary design changes.

**5.9 Limited Operation.** If any of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Elective Transmission Upgrade, System Operator and the Interconnecting Transmission Owner shall, upon the request and at the expense of Interconnection Customer, perform operating studies to determine the extent to which the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this ETU IA. System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the operating studies and permit Interconnection Customer to operate the Elective Transmission

Upgrade and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**5.10 Elective Transmission Upgrade ("ETU") and Interconnection Customer's Interconnection Facilities ("ICIF").** Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.10.1 Elective Transmission Upgrade Specifications.** Interconnection Customer shall submit initial specifications for the ETU and ICIF, including System Protection Facilities, to Interconnecting Transmission Owner at least one hundred eighty (180) Calendar Days prior to the Trial Operation Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Trial Operation Date. Interconnecting Transmission Owner shall review such specifications to ensure that the ETU and ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Interconnecting Transmission Owner's Review.** Interconnecting Transmission Owner's review of Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the ETU or the ICIF. Interconnection Customer shall make such changes to the ETU or the ICIF as may reasonably be required by Interconnecting Transmission Owner, in accordance with Good Utility Practice, to ensure that the ETU and ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner.

**5.10.3 ETU and ICIF Construction.** The ETU and ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Interconnecting

Transmission Owner “as-built” drawings, information and documents for the ETU and ICIF, such as: a one-line diagram, a site plan showing the ETU and the ICIF, plan and elevation drawings showing the layout of the ETU and ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the ETU and the ICIF, and the impedances (determined by factory tests) for any associated transformers. The Interconnection Customer shall provide Interconnecting Transmission Owner specifications for any and all controls, automatic voltage regulating equipment or controls, ETU control and protection settings, transformer tap settings, and communications, if applicable.

- 5.11 Interconnecting Transmission Owner’s Interconnection Facilities Construction.** The Interconnecting Transmission Owner’s Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnecting Transmission Owner shall deliver to the Interconnection Customer “as-built” drawings, information and documents for the Interconnecting Transmission Owner’s Interconnection Facilities. The appropriate drawings and relay diagrams shall be included in Appendix A of this ETU IA. The System Operator will obtain operational control of the Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities pursuant to the TOA.
- 5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party (“Granting Party”) shall furnish at the incremental cost to another Party (“Access Party”) any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents if allowed under the applicable agency agreement, that are necessary to enable the Access Party solely to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Elective Transmission Upgrade with the Administered Transmission System; (ii) operate and maintain the Elective Transmission Upgrade, the Interconnection Facilities and the New England Transmission System; and (iii) disconnect or remove the Access Party’s facilities and equipment upon termination of this ETU

IA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

**5.13 Lands of Other Property Owners.** If any part of the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall at Interconnection Customer's expense use Reasonable Efforts, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property. Notwithstanding the foregoing, the Interconnecting Transmission Owner shall not be obligated to exercise eminent domain authority in a manner inconsistent with Applicable Laws and Regulations or when an Interconnection Customer is authorized under Applicable Laws and Regulations to exercise eminent domain on its own behalf.

**5.14 Permits.** System Operator, Interconnecting Transmission Owner and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses, and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, Interconnecting Transmission Owner shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Interconnecting Transmission Owner's own, or an Affiliate's generation or transmission facilities, if any.

**5.15 Early Construction of Base Case Facilities.** Interconnection Customer may request Interconnecting Transmission Owner to construct, and Interconnecting Transmission Owner shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Administered Transmission System, which are included in the Base Case of the Facilities Study for the Interconnection Customer, and which also are required to be

constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date. The Interconnection Customer shall reimburse the Interconnecting Transmission Owner for all costs incurred related to early construction to the extent such costs are not recovered from other Interconnection Customers included in the base case.

**5.16 Suspension.** Interconnection Customer reserves the right, upon written notice to Interconnecting Transmission Owner and System Operator, to suspend at any time all work by Interconnecting Transmission Owner associated with the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades required under this ETU IA with the condition that the New England Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and the System Operator's and Interconnecting Transmission Owner's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Interconnecting Transmission Owner (i) has incurred pursuant to this ETU IA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the New England Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Interconnecting Transmission Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Interconnecting Transmission Owner shall obtain Interconnection Customer's authorization to do so. Interconnecting Transmission Owner shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work by Interconnecting Transmission Owner required under this ETU IA pursuant to this Article 5.16, and has not requested Interconnecting Transmission Owner to recommence the work required under this ETU IA on or before the expiration of three (3) years following commencement of such suspension, this ETU IA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Interconnecting Transmission Owner and System Operator, if no effective date is specified. A suspension under this Article 5.16 does not automatically permit an extension of the In-Service Date, the Trial Operation Date or the Commercial Operation Date. A request for

extension of such dates is subject to Section 4.4.5 of the ETU IP. Notwithstanding the extensions permitted under Section 4.4.5 of the ETU IP, the three-year period shall in no way result in an extension of the In-Service Date, the Trial Operation Date or the Commercial Operation Date that exceeds seven (7) years from the date of the Interconnection Request; otherwise, this ETU IA shall be deemed terminated.

## **5.17 Taxes.**

**5.17.1 Payments Not Taxable.** The Parties intend that all payments or property transfers made by any Party for the installation of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations and Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity transmitted on the Elective Transmission Upgrade will pass to another party prior to the transmission of the electricity on the New England Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Interconnecting Transmission Owner for the Interconnecting Transmission Owner's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Interconnecting Transmission Owner's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Elective Transmission Upgrade. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Interconnecting Transmission Owner's request, Interconnection Customer shall provide Interconnecting Transmission Owner with a report from an independent engineer confirming its representation in clause (iii), above. Interconnecting Transmission Owner represents and covenants that the cost of the Interconnecting Transmission Owner's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon Interconnecting Transmission Owner.** Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Interconnecting Transmission Owner from the cost consequences of any current tax liability imposed against Interconnecting Transmission Owner as the result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this ETU IA, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Interconnecting Transmission Owner.

The Interconnecting Transmission Owner shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges Interconnection Customer under this ETU IA unless (i) Interconnecting Transmission Owner has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Interconnecting Transmission Owner to report payments or property as income subject to taxation; provided, however, that Interconnecting Transmission Owner may require Interconnection Customer to provide security, in a form reasonably acceptable to Interconnecting Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Interconnecting Transmission Owner for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from Interconnecting Transmission Owner of the amount due, including detail about how the amount was calculated.



The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period, and the applicable statute of limitation, as it may be extended by the Interconnecting Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that Interconnection Customer will pay Interconnecting Transmission Owner, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Interconnecting Transmission Owner ("Current Taxes") on the excess of (a) the gross income realized by Interconnecting Transmission Owner as a result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this ETU IA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Interconnecting Transmission Owner to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1). For this purpose, (i) Current Taxes shall be computed based on Interconnecting Transmission Owner composite federal and state tax rates at the time the payments or property transfers are received and Interconnecting Transmission Owner will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Interconnecting Transmission Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Interconnecting Transmission Owner current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's

estimated tax liability in the event taxes are imposed shall be stated in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At Interconnection Customer's request and expense, Interconnecting Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Interconnecting Transmission Owner under this ETU IA are subject to federal income taxation. Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Interconnecting Transmission Owner and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Interconnecting Transmission Owner shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Interconnecting Transmission Owner shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within ten (10) years from the date on which the relevant Interconnecting Transmission Owner's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenant contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this ETU IA terminates and Interconnecting Transmission Owner retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on Interconnecting Transmission Owner, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that Interconnecting Transmission Owner's receipt of payments or property constitutes income that is subject to taxation, Interconnecting Transmission Owner shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Interconnecting Transmission Owner may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Interconnecting Transmission Owner may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Interconnecting Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Interconnecting Transmission Owner shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Interconnecting Transmission Owner may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Interconnecting Transmission Owner, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement

without Interconnection Customer's consent or such written advice will relieve Interconnection Customer from any obligation to indemnify Interconnecting Transmission Owner for the tax at issue in the contest.

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to Interconnecting Transmission Owner which holds that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this ETU IA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Interconnecting Transmission Owner in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this ETU IA is not taxable to Interconnecting Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Interconnecting Transmission Owner are not subject to federal income tax, or (d) if Interconnecting Transmission Owner receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Interconnecting Transmission Owner pursuant to this ETU IA, Interconnecting Transmission Owner shall promptly refund to Interconnection Customer the following:

- (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
- (ii) interest on any amounts paid by Interconnection Customer to Interconnecting Transmission Owner for such taxes which Interconnecting Transmission Owner did not submit to the taxing authority, interest calculated in accordance with the methodology set forth in the Commission's regulations at 18 CFR §35.19a(a)(2)(iii) from the date payment was made by Interconnection Customer to the date Interconnecting Transmission Owner refunds such payment to Interconnection Customer, and

(iii) with respect to any such taxes paid by Interconnecting Transmission Owner, any refund or credit Interconnecting Transmission Owner receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Interconnecting Transmission Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Interconnecting Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Interconnecting Transmission Owner will remit such amount promptly to Interconnection Customer only after and to the extent that Interconnecting Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Interconnecting Transmission Owner's Interconnection Facilities.

The intent of this provision is to leave Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Interconnecting Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Interconnecting Transmission Owner for which Interconnection Customer may be required to reimburse Interconnecting Transmission Owner under the terms of this ETU IA. Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, Interconnecting Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Interconnecting Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall

be payable by Interconnection Customer to Interconnecting Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Interconnecting Transmission Owner.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Party's(ies') tax status. Nothing in this ETU IA is intended to adversely affect any Interconnecting Transmission Owner's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** Either Interconnection Customer or Interconnecting Transmission Owner may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, the facilities of any Affected Parties, or the New England Transmission System, that Party shall provide to the other Parties and any Affected Party: (i) sufficient information regarding such modification so that the other Party(ies) may evaluate the potential impact of such modification prior to commencement of the work; and (ii) such information as may be required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Elective Transmission Upgrade. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party(ies) at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed. Notwithstanding the foregoing, no Party shall be obligated to proceed with a modification that would constitute a Material Modification and therefore

require an Interconnection Request under the ETU IP, except as provided under and pursuant to the ETU IP.

In the case of Elective Transmission Upgrade or Interconnection Customer's Interconnection Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Interconnecting Transmission Owner shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this ETU IA and Good Utility Practice.

**5.19.3 Modification Costs.** Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Interconnecting Transmission Owner makes to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System to facilitate the interconnection of a third party to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System, or to provide transmission service to a third party under the Tariff, except as provided for under the Tariff or any other applicable tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Elective Transmission Upgrade or Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## **ARTICLE 6. TESTING AND INSPECTION**

- 6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Interconnecting Transmission Owner shall test Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. Interconnection Customer shall bear the cost of all such testing and modifications. Interconnection Customer shall transmit test energy to or from the Elective Transmission Upgrade only if it has arranged for the transfer of such test energy.
- 6.2 Post-Commercial Operation Date Testing and Modifications.** Each Interconnection Customer and Interconnecting Transmission Owner shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, as may be necessary to ensure the continued interconnection of the Elective Transmission Upgrade to the Administered Transmission System in a safe and reliable manner. The Interconnection Customer and Interconnecting Transmission Owner each shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's(ies') facilities, at the requesting Party's expense, as may be in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator shall also have the right to require reasonable additional testing of the other Party's (ies') facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 6.3 Right to Observe Testing.** Each Party shall notify the System Operator and other Party(ies) in advance of its performance of tests of its Elective Transmission Upgrade and Interconnection Facilities. The other Party(ies) has the right, at its own expense, to observe such testing.
- 6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe the other Party's(ies') tests and/or inspection of any of its System Protection Facilities and other protective equipment; (ii) review the settings of the other Party's(ies') System Protection Facilities and other protective equipment; and (iii) review the other Party's(ies') maintenance



records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. Each Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be governed by Article 22.

## ARTICLE 7. METERING

- 7.1 General.** Interconnection Customer and Interconnecting Transmission Owner shall comply with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding metering. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment. Unless the System Operator otherwise agrees, the Interconnection Customer shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and energy being transmitted under this Tariff and to communicate the information to the System Operator. Unless otherwise agreed, such equipment shall remain the property of the Interconnecting Transmission Owner.
- 7.2 Check Meters.** Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check Interconnecting Transmission Owner's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this ETU IA, except as provided in Article 7.4 below. The check meters shall be subject at all reasonable times to inspection and examination by Interconnecting Transmission Owner or its designee. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Standards.** Interconnection Customer and Interconnecting Transmission Owner shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards and the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 7.4 Testing of Metering Equipment.** Interconnection Customer and Interconnecting Transmission Owner shall inspect and test all of their respectively owned Metering Equipment upon installation and thereafter as specified in the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnection Customer and Interconnecting Transmission Owner shall give reasonable notice of the time when any inspection or test shall take place, and may have representatives present at the test or inspection. If at any time Metering Equipment is

found to be inaccurate or defective, it shall be adjusted, repaired or replaced at Interconnection Customer's expense, in order to provide accurate metering. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than the values specified within ISO New England Operating Documents, or successor documents, from the measurement made by the standard meter used in the test, the Interconnection Customer and the Interconnecting Transmission Owner shall adjust the measurements of their respective equipment, in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 7.5 Metering Data.** At Interconnection Customer's expense, metered data shall be telemetered to one or more locations designated by System Operator and Interconnecting Transmission Owner. The hourly integrated metering, established in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, used to transmit Megawatt hour ("MWh") per hour data by electronic means and the Watt-hour meters equipped with kilowatt-hour ("kwh") or MWh registers to be read at month's end shall be the official measurement of the amount of energy transmitted from the Elective Transmission Upgrade to the Point of Interconnection. Instantaneous metering is required in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 8. COMMUNICATIONS**

- 8.1 Interconnection Customer Obligations.** Interconnection Customer shall maintain satisfactory operating communications with the System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 8.2 Remote Terminal Unit.** Prior to the Trial Operation Date of the Elective Transmission Upgrade, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Interconnection Customer or Interconnecting Transmission Owner at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by System Operator and Interconnecting Transmission Owner through use of a dedicated point-to-point data circuit(s). The communication protocol for

the data circuit(s) shall be specified by System Operator and Interconnecting Transmission Owner. All information required by the ISO New England Operating Documents, or successor documents, must be telemetered directly to the location(s) specified by System Operator and Interconnecting Transmission Owner.

Each Party will promptly advise the other Party(ies) if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party(ies). The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

**8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

**8.4 Reserved.**

## **ARTICLE 9. OPERATIONS**

**9.1 General.** Each Party shall comply with applicable provisions of ISO New England Operating Documents, Reliability Standards, or successor documents, regarding operations. Each Party shall provide to the other Party(ies) all information that may reasonably be required by the other Party(ies) to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

**9.2 Control Area Notification.** Before Trial Operation Date, the Interconnection Customer shall notify the System Operator and Interconnecting Transmission Owner in writing in accordance with ISO New England Operating Documents, Reliability Standards, or successor documents. If the Interconnection Customer elects to have the Elective Transmission Upgrade dispatched and operated from a remote Control Area other than the Control Area in which the Elective Transmission Upgrade is physically located, and if permitted to do so by the relevant transmission tariffs and ISO New England Operating Documents, Reliability Standards, or successor documents, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this ETU IA, and remote Control Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed

and implemented prior to the placement of the Elective Transmission Upgrade in the other Control Area for dispatch and operations.

**9.3 Interconnecting Transmission Owner and System Operator Obligations.** Interconnecting Transmission Owner and System Operator shall cause the Interconnecting Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this ETU IA and ISO New England Operating Documents, Reliability Standards, or successor documents. Interconnecting Transmission Owner or System Operator may provide operating instructions to Interconnection Customer consistent with this ETU IA, ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Interconnecting Transmission Owner's and System Operator's operating protocols and procedures as they may change from time to time. Interconnecting Transmission Owner and System Operator will consider changes to their operating protocols and procedures proposed by Interconnection Customer.

**9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this ETU IA and ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.5 Start-Up and Trial Operation.** The Interconnection Customer is responsible for the proper start-up and Trial Operation of the Elective Transmission Upgrade as part of the New England Transmission System in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6 Reactive Power.**

**9.6.1 Power Factor Design Criteria.** Interconnection Customer shall design the Elective Transmission Upgrade and Interconnection Facilities that are capable of voltage control to maintain a composite power delivery at continuous rated power output at the Point of Interconnection with dynamic reactive capability over the power factor range of 0.95

leading to 0.95 lagging or any reactive power or power factor requirement specified in the Interconnection System Impact Study for the Elective Transmission Upgrade, unless the System Operator or Interconnecting Transmission Owner has established different requirements that apply to all similar-situated facilities in the Control Area on a comparable basis and in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has commenced Trial Operation of the Elective Transmission Upgrade to the New England Transmission System, Interconnection Customer shall operate the Elective Transmission Upgrade at the direction of System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding voltage schedules in accordance with such requirements.

**9.6.2.1 Voltage Regulating Equipment.** The Interconnection Customer must keep and maintain voltage regulating equipment on all voltage-controlling elements of the Elective Transmission Upgrade and Interconnection Facilities any voltage control requirements specified in the Interconnection System Impact Study and in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. All Interconnection Customers that have, or are required to have, voltage regulating equipment shall normally operate the voltage regulating equipment in automatic operation.

It is the responsibility of the Interconnection Customer to maintain the voltage regulating equipment and function in good operating condition and promptly report to the System Operator and Interconnecting Transmission Owner any problems that could cause interference with its proper operation.

**9.6.2.2 Governor Control.** The Interconnection Customer is obligated to provide and maintain a functioning governor or frequency regulation on all elements of the Elective Transmission Upgrade and Interconnection Facilities that are capable of

frequency regulation in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

It is the responsibility of the Interconnection Customer to maintain the frequency regulating equipment and function in good operating condition and promptly report to the System Operator and Interconnecting Transmission Owner any problems that could cause interference with its proper operation.

**9.6.2.3 System Protection.** The Interconnection Customer shall install and maintain protection systems in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6.3 Payment for Reactive Power.**

Interconnection Customers shall be compensated for Reactive Power service in accordance with Schedule 2 of the Section II of the Tariff.

**9.7 Outages and Interruptions.**

**9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** The System Operator shall have the authority to coordinate facility outages in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Each Party may in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, in coordination with the other Party(ies), remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's(ies') facilities as necessary to perform maintenance or testing or to install or replace equipment, subject to the oversight of System Operator in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.1.2 Outage Schedules.** Outage scheduling, and any related compensation, shall be in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.2 Interruption of Service.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, the System Operator or Interconnecting Transmission Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect System Operator's or Interconnecting Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the New England Transmission System.

**9.7.3 Under-Frequency and Over Frequency Conditions.** Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Elective Transmission Upgrade and the Interconnection Facilities as required by the applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Elective Transmission Upgrade response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with System Operator and Interconnecting Transmission Owner in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnecting Transmission Owner shall install at Interconnection Customer's expense, in accordance with the ISO New England Operating Documents, Applicable



Reliability Standards, or successor documents, any System Protection Facilities that may be required on the Interconnecting Transmission Owner Interconnection Facilities or the New England Transmission System as a result of the interconnection of the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** Each Party's protection facilities shall be designed and coordinated with other systems in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.3** Each Party shall be responsible for protection of its facilities consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.4** Each Party's protective relay design shall allow for tests required in Article 6.

**9.7.4.5** Each Party will test, operate and maintain System Protection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.5 Requirements for Protection.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and compliance with Good Utility Practice, Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Elective Transmission Upgrade to any short circuit occurring on the New England Transmission System not otherwise isolated by Interconnecting Transmission Owner's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the New England Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Elective Transmission Upgrade and the New England Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties.

Interconnection Customer shall be responsible for protection of the Elective Transmission Upgrade and Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. Interconnection Customer shall be solely responsible to disconnect the Elective Transmission Upgrade and Interconnection Customer's other equipment if conditions on the New England Transmission System could adversely affect the Elective Transmission Upgrade. Relays and other equipment that protect for other conditions such as over- or under-frequency, over- or under-voltage, and overloads shall be coordinated with the protective requirements of the New England Transmission System.

**9.7.6 Power Quality.** A Party's facilities shall not cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard.

**9.8 Switching and Tagging Rules.** Each Party shall provide the other Party(ies) with a copy of its switching and tagging rules that are applicable to the other Party's activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Elective Transmission Upgrade to the Administered Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more

third parties to use the Interconnecting Transmission Owner's Interconnection Facilities, or any part thereof, Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to the Commission for resolution.

- 9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Elective Transmission Upgrade or the New England Transmission System by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 10. MAINTENANCE**

- 10.1 Interconnecting Transmission Owner and Customer Obligations.** Interconnecting Transmission Owner and Interconnection Customer shall each maintain that portion of its respective facilities that are part of the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities in a safe and reliable manner and in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 10.2 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of Interconnecting Transmission Owner's Interconnection Facilities, Stand Alone Network Upgrades, Network Upgrades and Distribution Upgrades.

## **ARTICLE 11. PERFORMANCE OBLIGATION**

- 11.1 Interconnection Customer's Interconnection Facilities.** Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at its sole expense.
- 11.2 Interconnecting Transmission Owner's Interconnection Facilities.** Interconnecting Transmission Owner shall design, procure, construct, install, own and/or control the Interconnecting Transmission Owner's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at the sole expense of the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.** Interconnecting Transmission Owner shall design, procure, construct, install, and own the Network Upgrades, and to the extent provided by Article 5.1, Stand Alone Network Upgrades, and Distribution Upgrades described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades). The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Interconnecting Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by the Interconnection Customer.
- 11.4 Cost Allocation; Compensation; Rights; Affected Systems**

**11.4.1 Cost Allocation.** Cost allocation of ETU Interconnection Related Upgrades shall be in accordance with Schedules 11 and 12 of Section II of the Tariff.

**11.4.2 Compensation.** Any compensation due to the Interconnection Customer for increases in transfer capability to the PTF resulting from its ETU and associated system upgrades shall be determined in accordance with Sections II and III of the Tariff.

**11.4.3 Rights.** Notwithstanding any other provision of this ETU IA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades.

**11.4.4 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into separate related facilities agreements to address any upgrades to the Affected System(s) that are necessary for safe and reliable interconnection of the Interconnection Customer's Elective Transmission Upgrade.

**11.5 Provision of Security.** At least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of an Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Interconnecting Transmission Owner a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Interconnecting Transmission Owner in accordance with the Tariff. In addition:

**11.5.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Interconnecting Transmission Owner, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

**11.5.2** The letter of credit must be issued by a financial institution reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.5.3** The surety bond must be issued by an insurer reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.6 Interconnection Customer Compensation.** If System Operator or Interconnecting Transmission Owner requests or directs Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power), or 13.4.1 of this ETU IA, Interconnection Customer shall be compensated pursuant to the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.** Interconnection Customer shall be compensated for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the New England Transmission System during an Emergency Condition in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 12. INVOICE**

**12.1 General.** Each Party shall submit to the other Party(ies), on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party(ies) under this ETU IA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**12.2 Final Invoice.** Within six months after completion of the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, Interconnecting Transmission Owner shall provide an invoice of the final cost of the construction of the

Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades and shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates.

Interconnecting Transmission Owner shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice. Interconnection Customer shall pay to Interconnecting Transmission Owner any amount by which the actual payment by Interconnection Customer for estimated costs falls short of the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

**12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by any Party will not constitute a waiver of any rights or claims the other Party(ies) may have under this ETU IA.

**12.4 Disputes.** In the event of a billing dispute between Interconnecting Transmission Owner and Interconnection Customer, Interconnecting Transmission Owner shall continue to provide Interconnection Service under this ETU IA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Interconnecting Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet these two requirements for continuation of service, then Interconnecting Transmission Owner may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accord with the methodology set forth in the Commission's Regulations at 18 CFR § 35.19a(a)(2)(iii).

## **ARTICLE 13. EMERGENCIES**

**13.1 Obligations.** Each Party shall comply with the Emergency Condition procedures of the System Operator in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**13.2 Notice.** Interconnecting Transmission Owner or System Operator as applicable shall notify Interconnection Customer and System Operator or Interconnecting Transmission Owner as applicable, promptly when it becomes aware of an Emergency Condition that affects the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Interconnecting Transmission Owner and System Operator promptly when it becomes aware of an Emergency Condition that affects the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of Interconnection Customer's or Interconnecting Transmission Owner's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.

**13.3 Immediate Action.** Unless, in Interconnection Customer's reasonable judgment, immediate action is required, Interconnection Customer shall obtain the consent of Interconnecting Transmission Owner and System Operator, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by the Interconnecting Transmission Owner or the System Operator or otherwise regarding the New England Transmission System.

**13.4 System Operator's and Interconnecting Transmission Owner's Authority.**



**13.4.1 General.** System Operator or Interconnecting Transmission Owner may take whatever actions or inactions with regard to the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities it deems necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the New England Transmission System or Interconnecting Transmission Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities. System Operator and Interconnecting Transmission Owner may, on the basis of technical considerations and equipment capabilities, require the Elective Transmission Upgrade to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Elective Transmission Upgrade; implementing a reduction or disconnection pursuant to Article 13.4.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of System Operator's and Interconnecting Transmission Owner's operating instructions concerning Elective Transmission Upgrade real power and reactive power output within the manufacturer's design limitations of the Elective Transmission Upgrade's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.4.2 Reduction and Disconnection.** System Operator and Interconnecting Transmission Owner may reduce Interconnection Service or disconnect the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. These

rights are separate and distinct from any right of curtailment of the System Operator and Interconnecting Transmission Owner pursuant to the Tariff. When the System Operator and Interconnecting Transmission Owner can schedule the reduction or disconnection in advance, System Operator and Interconnecting Transmission Owner shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. System Operator and Interconnecting Transmission Owner shall coordinate with the Interconnection Customer in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the System Operator and Interconnecting Transmission Owner. Any reduction or disconnection shall continue only for so long as reasonably necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The Parties shall cooperate with each other to restore the Elective Transmission Upgrade, the Interconnection Facilities, and the New England Transmission System to their normal operating state as soon as practicable in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**13.5 Interconnection Customer Authority.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents and the ETU IA and the ETU IP, the Interconnection Customer may take whatever actions or inactions with regard to the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities. System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.6 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this ETU IA, a Party shall not be liable to another Party for any action it takes in responding to an Emergency Condition so

long as such action is made in good faith and in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

#### **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**

**14.1 Regulatory Requirements.** Each Party's obligations under this ETU IA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this ETU IA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended. To the extent that a condition arises that could result in Interconnection Customer's inability to obtain, or its loss of, status or exemption under the Federal Power Act, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, the Parties shall engage in good faith negotiations to address the condition so that such result will not occur and so that this ETU IA can be performed.

#### **14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this ETU IA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This ETU IA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

#### **ARTICLE 15. NOTICES**

- 15.1 General.** Unless otherwise provided in this ETU IA, any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F (Addresses for Delivery of Notices and Billings).  
A Party may change the notice information in this ETU IA by giving five (5) Business Days written notice prior to the effective date of the change.
- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.
- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.
- 15.4 Operations and Maintenance Notice.** Each Party shall notify the other Party(ies) in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **ARTICLE 16. FORCE MAJEURE**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** A Party shall not be considered to be in Default with respect to any obligation hereunder (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of

Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party(ies) in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **ARTICLE 17. DEFAULT**

### **17.1 Default.**

**17.1.1 General.** No Breach shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this ETU IA or the result of an act or omission of the other Party(ies). Upon a Breach, the non-Breaching Party shall give written notice of such Breach to the breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the non-Breaching Party(ies) shall have the right to terminate this ETU IA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not those Parties terminate this ETU IA, to recover from the Breaching Party all amounts due

hereunder, plus all other damages and remedies to which they are entitled at law or in equity. The provisions of this Article will survive termination of this ETU IA.

## **ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

Notwithstanding any other provision of this Agreement, the liability, indemnification and insurance provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner and the liability, indemnification and insurance provisions of the Tariff apply to the relationship between the System Operator and the Interconnection Customer and between the Interconnecting Transmission Owner and the Interconnection Customer.

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and save the other Party(ies) harmless from any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s(ies’) action or inactions of their obligations under this ETU IA on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by an indemnified Party.

**18.1.1 Indemnified Person.** If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Person may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, the amount owing to the Indemnified

Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

The Indemnified Person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the Indemnifying Party, in which event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any

judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be reasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Other than the Liquidated Damages heretofore described, in no event shall a Party be liable under any provision of this ETU IA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** The Interconnecting Transmission Owner and the Interconnection Customer shall, at their own expense, maintain in force throughout the period of this ETU IA, and until released by the other Party(ies), the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death, and property damage.



- 18.3.3** Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
- 18.3.4** Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
- 18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party(ies), its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this ETU IA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.
- 18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after

termination of this ETU IA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

**18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this ETU IA.

**18.3.9** Within ten (10) days following execution of this ETU IA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this ETU IA, executed by each insurer or by an authorized representative of each insurer.

**18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program, provided that such Party's senior secured debt is rated at investment grade, or better, by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article, it shall notify the other Party(ies) that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this ETU IA.

## **ARTICLE 19. ASSIGNMENT**

**19.1 Assignment.** This ETU IA may be assigned by any Party only with the written consent of the other Parties; provided that the Parties may assign this ETU IA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this ETU IA; and provided further that the Interconnection Customer shall have the right to assign this ETU IA, without the consent of the Interconnecting Transmission Owner or System Operator, for collateral security purposes to aid in providing financing for the Elective Transmission Upgrade, provided that the Interconnection Customer will promptly notify the Interconnecting Transmission Owner and System Operator of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the Interconnecting Transmission Owner and System Operator of the date and particulars of any such exercise of assignment right(s), including providing the Interconnecting Transmission Owner with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this ETU IA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **ARTICLE 20. SEVERABILITY**

**20.1 Severability.** If any provision in this ETU IA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this ETU IA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Interconnecting Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **ARTICLE 21. COMPARABILITY**

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **ARTICLE 22. CONFIDENTIALITY**

- 22.1 Confidentiality.** Confidential Information shall include, without limitation, all information governed by the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another prior to the execution of this ETU IA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by a Party, the other Party(ies) shall provide, in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- 22.1.1 Term.** During the term of this ETU IA, and for a period of three (3) years after the expiration or termination of this ETU IA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

- 22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party

on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this ETU IA; or (6) is required, in accordance with Article 22.1.7 of the ETU IA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this ETU IA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party(ies) that it no longer is confidential.

**22.1.3 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or are considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with this ETU IA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any

particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under this ETU IA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Governmental Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of this ETU IA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this ETU IA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party(ies), use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party(ies)) or return to the other Party(ies), without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party(ies).

**22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its

obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Parties shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR. section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this ETU IA, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) to this ETU IA prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party(ies) to the ETU IA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this ETU IA (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure

is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this ETU IA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Parties' Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

- 23.1** Each Party shall notify the other Party(ies), first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Elective Transmission Upgrade or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party(ies). The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four (24) hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party(ies) copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **ARTICLE 24. INFORMATION REQUIREMENTS**

- 24.1 Information Acquisition.** Subject to any applicable confidentiality restrictions, including, but not limited to, codes of conduct, each Party shall submit specific information regarding the



electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by System Operator and Interconnecting Transmission Owner.**

The initial information submission by System Operator and Interconnecting Transmission Owner shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation Date and shall include information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise mutually agreed to by the Parties. On a monthly basis Interconnecting Transmission Owner shall provide Interconnection Customer a status report on the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation Date.

Interconnection Customer shall submit a completed copy of the Elective Transmission Upgrade data requirements contained in Appendix 1 to the ETU IP. It shall also include any additional information provided to Interconnecting Transmission Owner and System Operator for the Interconnection Feasibility Study, Interconnection System Impact Study and Interconnection Facilities Study. Information in this submission shall be the most current Elective Transmission Upgrade design or expected performance data. Information submitted for stability models shall be compatible with Interconnecting Transmission Owner and System Operator standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is different from what was originally provided to Interconnecting Transmission Owner pursuant to the Interconnection Study Agreement between Interconnecting Transmission Owner and Interconnection Customer, then the System Operator

will review it and conduct appropriate studies, as needed, at the Interconnection Customer's cost, to determine the impact on the New England Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

**24.4 Information Supplementation.** Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all “as-built” Elective Transmission Upgrade information and “as-tested” performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Elective Transmission Upgrade as required by Good Utility Practice to verify proper operation of the Elective Transmission Upgrade's voltage regulation capability, and of other automatic controls for which the Elective Transmission Upgrade is reliant upon for acceptable performance, as described and requested by the System Operator. Documentation of the test results will be provided to the System Operator.

The Interconnection Customer shall provide the Interconnecting Transmission Owner and System Operator with any information changes due to proposed equipment replacement, repair, or adjustment. Interconnecting Transmission Owner shall provide the Interconnection Customer and System Operator with any information changes due to proposed equipment replacement, repair or adjustment in the directly connected substation or any adjacent Interconnecting Transmission Owner-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information in accordance with Article 5.19 of this Agreement.

## **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

**25.1 Information Access.** Each Party (the “disclosing Party”) shall make available to the other Parties information that is in the possession of the disclosing Party and is necessary in order for the other Party(ies) to: (i) verify the costs incurred by the disclosing Party for which the other Party(ies) are responsible under this ETU IA; and (ii) carry out its obligations and responsibilities under this ETU IA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this ETU IA.

**25.2 Reporting of Non-Force Majeure Events.** Each Party (the “notifying Party”) shall notify the other Party(ies) when the notifying Party becomes aware of its inability to comply with the provisions of this ETU IA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory Breach of this ETU IA.

**25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this ETU IA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the other Party(ies), to audit at its own expense the other Party’s(ies’) accounts and records pertaining to a Party’s performance or a Party’s satisfaction of obligations under this ETU IA. Such audit rights shall include audits of the other Party’s(ies’) costs, calculation of invoiced amounts, the efforts to allocate responsibility for the provision of reactive support to the New England Transmission System, the efforts to allocate responsibility for interruption or reduction of generation on the New England Transmission System, and each Party’s actions in an Emergency Condition. Any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party’s performance and satisfaction of obligations under this ETU IA. Each Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

**25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Interconnecting Transmission Owner’s Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four (24) months following Interconnecting Transmission Owner’s issuance of a final invoice in accordance with Article 12.2.

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this ETU IA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four (24) months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four (24) months after the event for which the audit is sought.

**25.5 Audit Results.** If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party(ies) together with those records from the audit which support such determination.

## **ARTICLE 26. SUBCONTRACTORS**

**26.1 General.** Nothing in this ETU IA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this ETU IA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this ETU IA in providing such services and each Party shall remain primarily liable to the other Party(ies) for the performance of such subcontractor.

**26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this ETU IA. The hiring Party shall be fully responsible to the other Party(ies) for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this ETU IA. Any applicable obligation imposed by this ETU IA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **ARTICLE 27. DISPUTES**

- 27.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with this ETU IA or its performance, such Party (the "disputing Party") shall provide the other Party(ies) with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's(ies') receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this ETU IA.
- 27.2 External Arbitration Procedures.** Any arbitration initiated under this ETU IA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail

**27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this ETU IA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel; or (2) a pro rata share of the cost of a single arbitrator chosen by the Parties.

## **ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS**

**28.1 General.** Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Elective Transmission Upgrade, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this ETU IA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this ETU IA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this ETU IA, to become a Party hereto and to perform its obligations hereunder. This ETU IA is a legal,

valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.** The execution, delivery and performance of this ETU IA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this ETU IA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this ETU IA, and it will provide to any Governmental Authority notice of any actions under this ETU IA that are required by Applicable Laws and Regulations.

## **ARTICLE 29. [OMITTED]**

## **ARTICLE 30. MISCELLANEOUS**

**30.1 Binding Effect.** This ETU IA and the rights and obligations hereof shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**30.2 Conflicts.** In the event of a conflict between the body of this ETU IA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this ETU IA shall prevail and be deemed the final intent of the Parties.

**30.3 Rules of Interpretation.** This ETU IA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this ETU IA, and reference to a

person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this ETU IA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this ETU IA or such Appendix of this ETU IA, or such Section of the ETU IP or such Appendix of the ETU IP, as the case may be; (6) “hereunder”, “hereof”, “herein”, “hereto” and words of similar import shall be deemed references to this ETU IA as a whole and not to any particular Article or other provision hereof or thereof; (7) “including” (and with correlative meaning “include”) means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, “from” means “from and including”, “to” means “to but excluding” and “through” means “through and including”.

**30.4 Entire Agreement.** Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, this ETU IA, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this ETU IA. Except for the ISO New England Operating Documents, Applicable Reliability Standards, any applicable tariffs, related facilities agreements, or successor documents, there are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party’s compliance with its obligations under this ETU IA.

**30.5 No Third Party Beneficiaries.** This ETU IA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.



**30.6 Waiver.** The failure of a Party to this ETU IA to insist, on any occasion, upon strict performance of any provision of this ETU IA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by a Party of its rights with respect to this ETU IA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this ETU IA. Termination or Default of this ETU IA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Interconnecting Transmission Owner. Any waiver of this ETU IA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this ETU IA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this ETU IA.

**30.8 Multiple Counterparts.** This ETU IA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment.** The Parties may by mutual agreement amend this ETU IA by a written instrument duly executed by the Parties.

**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this ETU IA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this ETU IA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** Consistent with Section 11.3 of the ETU IP, Interconnecting Transmission Owner and System Operator shall have the right to make unilateral filings with the Commission to modify this ETU IA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of

the Federal Power Act and the Commission's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this ETU IA pursuant to section 206 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Parties and to participate fully in any proceeding before the Commission in which such modifications may be considered. In the event of disagreement on terms and conditions of the ETU IA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the Federal Power Act shall apply only to Interconnecting Transmission Owner's position on such terms and conditions. Nothing in this ETU IA shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This ETU IA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Parties.

**IN WITNESS WHEREOF**, the Parties have executed this ETU IA in triplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

**ISO New England Inc. (System Operator)**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***[Insert Name of (Interconnecting Transmission Owner(s))***

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***[Insert name of] (Interconnection Customer)***

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDICES TO ETU IA**

Appendix A	Interconnection Facilities, Network Upgrades and Distribution Upgrades
Appendix B	Milestones
Appendix C	Interconnection Details
Appendix D	Security Arrangements Details
Appendix E	Commercial Operation Date
Appendix F	Addresses for Delivery of Notices and Billings

## **APPENDIX A TO ETU IA**

### **Interconnection Facilities, Network Upgrades and Distribution Upgrades**

#### **1. Interconnection Facilities:**

##### **a. Point(s) of Interconnection**

List and identify each Point of Interconnection (*e.g.*, first, second, etc.)

The Point of Interconnection for the first terminal location shall be at the point where *[insert description of the first location internal to New England Control Area]*. See Appendix A-1, which drawing is attached hereto and made part hereof.

The Point of Interconnection for the second terminal location shall be at the point where *[insert description of the second location internal to New England Control Area or the location external to New England Control Area]*. See Appendix A-2, which drawing is attached hereto and made part hereof.

##### **b. Point(s) of Change of Ownership**

List and identify the Point of Change of Ownership for each Point of Interconnection (*e.g.*, first, second, etc.)

The Point of Change of Ownership for the first terminal location shall be at the point where *[insert description of the first location internal to New England Control Area]*. See Appendix A-1, which drawing is attached hereto and made part hereof.

The Point of Change of Ownership for the second terminal location shall be at the point where *[insert description of the second location internal to New England Control Area or the location external to New England Control Area]*. See Appendix A-2, which drawing is attached hereto and made part hereof.

**c. Metering**

List and identify the metering point for each Point of Interconnection (*e.g.*, first, second, etc.)

The metering point for the first terminal location shall be located at where [*insert description of the first location internal to New England Control Area*]. See Appendix A-1, which drawing is attached hereto and made part hereof.

The metering point for the second terminal location shall be located at where [*insert description of the second location internal to New England Control Area or the location external to New England Control Area*]. See Appendix A-2, which drawing is attached hereto and made part hereof.

**d. Interconnection Customer's Interconnection Facilities (including metering equipment).**

List and identify the Interconnection Customer's Interconnection Facilities for each Point of Interconnection (*e.g.*, first, second, etc.)

The Interconnection Customer's Interconnection Facilities for the first terminal location shall include [*insert Interconnection Customer's Interconnection Facilities*]. See Appendix A-1.

The Interconnection Customer's Interconnection Facilities for the second terminal location shall include [*insert Interconnection Customer's Interconnection Facilities for the second terminal location*]. See Appendix A-2.

**e. Interconnecting Transmission Owner's Interconnection Facilities (including metering equipment).**

List and identify the Interconnecting Transmission Owner's Interconnection Facilities for each Point of Interconnection (*e.g.*, first, second, etc.)

The Interconnecting Transmission Owner's Interconnection Facilities for the first terminal location shall include [*insert Interconnecting Transmission Owner's Interconnection Facilities, including any Cluster Enabling Transmission Upgrades, for the first terminal location*]. See Appendix –1.

The Interconnecting Transmission Owner's Interconnection Facilities for the second terminal location shall include [*insert Interconnecting Transmission Owner's Interconnection Facilities for the second terminal location*]. See Appendix –2.

**2. Network Upgrades:**

- a. **Stand Alone Network Upgrades.** [*insert Stand Alone Network Upgrades associated with the first terminal location*]
- b. **Other Network Upgrades.** [*insert Other Network Upgrades, including any Cluster Enabling Transmission Upgrades, associated with the first terminal location*].
- c. **Stand Alone Network Upgrades.** [*insert Stand Alone Network Upgrades associated with the second terminal position if it is internal to the New England Control Area, list all Network Upgrades for terminal locations external to New England Control Area as Affected System Upgrades*].
- d. **Other Network Upgrades.** [*insert Other Network Upgrades associated with the second terminal position if it is internal to New England Control Area, list all Network Upgrades for terminal locations external to New England Control Area as Affected System Upgrades*].

**3. Distribution Upgrades.**

- a. [*insert Distribution Upgrades associated with the first terminal position*]

- b. *[insert Distribution Upgrades associated with the second terminal position if it is internal to New England Control Area, list all Distribution Upgrades for terminal locations external to New England Control Area as Affected System Upgrades]*

**4. Affected System Upgrades.**

- a. *[insert Affected System Upgrades associated with the first terminal position]*
- b. *[insert Affected System Upgrades associated with the second terminal position]*

**5. Contingency Upgrades List:**

**a. Long Lead Facility-Related Upgrades.**

The Interconnection Customer's Elective Transmission Upgrade is associated with a Long Lead Facility, in accordance with Section 3.2.3 of the ETU IP. Pursuant to Section 4.1.1 of the ETU IP, the Interconnection Customer shall be responsible for the following upgrades in the event that the Long Lead Facility achieves Commercial Operation and its counterparty obtains a Capacity Supply Obligation in accordance with Section III.13.1 of the Tariff:

*[insert]*

If the Interconnection Customer fails to cause these upgrades to be in-service prior to the commencement of the Long Lead Facility's associated) counterparty's Capacity Commitment Period, the Interconnection Customer shall be deemed to be in Breach of this ETU IA in accordance with Article 17.1, and the System Operator will initiate all necessary steps to terminate this ETU IA, in accordance with Article 2.3.

- b. **Other Contingency Upgrades.** *[e.g., list of upgrades associated with higher queued Interconnection Requests and any other contingency upgrades that the Parties may deem necessary for the interconnection of the Elective Transmission Upgrade]*
- c. **Post-Forward Capacity Auction Re-study Upgrade Obligations.** *[insert any change in upgrade obligations that result from re-study conducted post receiving a Capacity Supply Obligation through a Forward Capacity Auction]*





## APPENDIX B TO ETU IA

### Milestones

- 1. Selected Option Pursuant to Article 5.1:** Interconnection Customer selects the *[insert]*. Options as described in Articles 5.1.*[insert]*, 5.1.*[insert]*, and 5.1.*[insert]* ] shall not apply to this ETU IA.
- 2. Milestones and Other Requirements for all Elective Transmission Upgrades:** The description and entries listed in the following table establish the required Milestones in accordance with the provisions of the ETU IP and this ETU IA. The referenced section of the ETU IP or article of the ETU IA should be reviewed by each Party to understand the requirements of each milestone.

Item No.	Milestone Description	Responsible Party	Date	ETU IP/ETU IA Reference
1	Provide evidence of continued Site Control to System Operator, or \$250,000 non-refundable deposit to the Interconnecting Transmission Owner	Interconnection Customer	Within 15 BD of final ETU IA receipt	§ 11.3.1.1 of ETU IP
2	Provide evidence of one or more milestones specified in § 11.3 of ETU IP to the System Operator and to the Interconnecting Transmission Owner	Interconnection Customer	Within 15 BD of final ETU IA receipt	§ 11.3.1.2 of ETU IP
3	Commit to a schedule for payment of upgrades to the	Interconnection Customer	Within 15 BD of final ETU IA receipt	§ 11.3.1.2 of ETU IP

	Interconnecting Transmission Owner			
4	Provide either (1) evidence of Major Permits to the System Operator and the Interconnecting Transmission Owner or (2) a refundable deposit to the Interconnecting Transmission Owner	Interconnection Customer	If (1) Within 15 BD of final ETU IA receipt or if (2) At time of ETU IA execution	§ 11.3.1.2 of ETU IP
5	Provide certificate of insurance to each Party	Interconnection Customer and Interconnecting Transmission Owner	Within 10 Calendar Days of execution of ETU IA	§ 18.3.9 of ETU IA
6A	Provide siting process approval schedule for the Elective Transmission Upgrade to System Operator and Interconnecting Transmission Owner	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
6B	Provide siting process approval schedule for Interconnection Customer's Interconnection Facilities at the first terminal location to System Operator and	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP

	Interconnecting Transmission Owner			
6C	Provide siting process approval schedule for Interconnection Customer's Interconnection Facilities at the second terminal location to System Operator and Interconnecting Transmission Owner	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
7A	Receive Governmental Authority approvals for a the Elective Transmission Upgrade facilities requiring regulatory approval	Interconnection Customer	If needed, as may be agreed to by the Parties	
7B	Receive Governmental Authority approvals for any facilities associated with the first terminal location requiring regulatory approval	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.1 of ETU IA
7C	Receive Governmental Authority approvals for any facilities associated with the second terminal location requiring regulatory approval	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.1 of ETU IA

8A	Obtain necessary real property rights and rights-of-way associated with the first terminal location for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.2 of ETU IA
8B	Obtain necessary real property rights and rights-of-way associated with the second terminal location for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.2 of ETU IA
9A	Provide to Interconnecting Transmission Owner associated with the first terminal position written authorization to proceed with design,	Interconnection Customer	As may be agreed to by the Parties	§ 5.6.3 of ETU IA

	equipment procurement and construction			
9B	Provide to owner associated with the second terminal position written authorization to proceed with design, equipment procurement and construction	Interconnection Customer	As may be agreed to by the Parties	§ 5.6.3 of ETU IA
10	Provide quarterly written progress reports	Interconnection Customer and Interconnecting Transmission Owner	15 Calendar Days after the end of each quarter beginning the quarter that includes earlier of the dates for Milestones 9A or 9B and ending when the entire Elective Transmission Upgrade and all required Interconnection Facilities and Network Upgrades are in place	§ 5.7 of ETU IA

11A	Provision of Security associated with the first terminal position to the Interconnecting Transmission Owner pursuant to Section 11.5 of ETU IA	Interconnection Customer	At least 30 Calendar Days prior to design, procurement and construction	§§ 5.5.3 and 5.6.4 of ETU IA
11B	Provision of Security associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner pursuant to Section 11.5 of ETU IA	Interconnection Customer	At least 30 Calendar Days prior to design, procurement and construction	§§ 5.5.3 and 5.6.4 of ETU IA
12A	Provision of Security Associated with Tax Liability associated with the first terminal position to Interconnecting Transmission Owner pursuant to Section 5.17.3 of ETU IA	Interconnection Customer	As may be agreed to by the Parties	§ 5.17.3 of ETU IA
12B	Provision of Security Associated with Tax Liability associated with the second terminal position, if it is internal to ISO-NE, to Interconnecting	Interconnection Customer	As may be agreed to by the Parties	§ 5.17.3 of ETU IA

	Transmission Owner pursuant to Section 5.17.3 of ETU IA			
13A	Commit to the ordering of long lead time material for Interconnection Facilities and Network Upgrades associated with the first terminal position	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
13B	Commit to the ordering of long lead time material for Interconnection Facilities and Network Upgrades associated with the second terminal position, if it is internal to ISO-NE	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
14A	Provide initial design, engineering and specification for the Elective Transmission Upgrade	Interconnection Customer	180 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
14B	Provide initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated	Interconnection Customer	180 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP



	with the first terminal position to the Interconnecting Transmission Owner			
C	Provide initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner	Interconnection Customer	180 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
15A	Provide comments on initial design, engineering and specification for the Elective Transmission Upgrade	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
15B	Provide comments on initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP

15C	Provide comments on initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
16A	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position to Interconnecting Transmission Owner(s)	Interconnection Customer	90 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
16B	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position to	Interconnection Customer	90 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP

	Interconnecting Transmission Owner(s)			
16C	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner	Interconnection Customer	90 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
17A	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
17B	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP

	Facilities associated with the first terminal position			
17C	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
18A	Deliver to Transmission Owner "as built" drawings, information and documents regarding Interconnection Customer's Interconnection Facilities associated with the first terminal position	Interconnection Customer	Within 120 Calendar Days of Commercial Operation date	§ 5.10.3 of ETU IA
18B	Deliver to Transmission Owner "as built" drawings, information and documents regarding Interconnection Customer's	Interconnection Customer	Within 120 Calendar Days of Commercial Operation date	§ 5.10.3 of ETU IA

	Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE			
19A	Provide protective relay settings associated with the first terminal position to the Interconnecting Transmission Owner for coordination and verification	Interconnection Customer	At least 90 Calendar Days prior to Trial Operation Date	§§ 5.10.1 of ETU IA
19B	Provide protective relay settings associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner for coordination and verification	Interconnection Customer	At least 90 Calendar Days prior to Trial Operation Date	§§ 5.10.1 of ETU IA
20A	Commencement of construction of Interconnection Facilities associated with the first terminal position	Interconnecting Transmission Owner(s)	As may be agreed to by the Parties	§ 5.6 of ETU IA
20B	Commencement of construction of Interconnection	Interconnecting Transmission Owner(s)	As may be agreed to by the Parties	§ 5.6 of ETU IA

	Facilities associated with the second terminal position, if it is internal to ISO-NE			
21	Submit updated data “as purchased”	Interconnection Customer	No later than 180 Calendar Days prior to Trial Operation Date	§ 24.3 of ETU IA
22A	In Service Date of first terminal position	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1 and 4.4.5 of ETU IP, § 5.1 of ETU IA
22B	In Service Date of second terminal position	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1 and 4.4.5 of ETU IP, § 5.1 of ETU IA
23	Trial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1, 4.4.4, 4.4.5, and 7.5 of ETU IP
24A	Submit supplemental and/or updated data – “as built/as-tested” associated with first terminal position	Interconnection Customer	Prior to Commercial Operation Date	§ 24.4 of ETU IA
24B	Submit supplemental and/or updated data – “as built/as-tested”	Interconnection Customer	Prior to Commercial Operation Date	§ 24.4 of ETU IA

	associated with second terminal position			
25	Commercial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1, 4.4.4, 4.4.5, and 7.5 of ETU IP
26A	Deliver to Interconnection Customer “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities associated with first terminal position	Interconnecting Transmission Owner	If requested, within 120 Calendar Days after Commercial Operation Date	§ 5.11 of ETU IA
26B	Deliver to Interconnection Customer “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities associated with the second terminal position	Interconnecting Transmission Owner	If requested, within 120 Calendar Days after Commercial Operation Date	§ 5.11 of ETU IA

27A	Provide Interconnection Customer final cost invoices associated with first terminal position	Interconnecting Transmission Owner	Within 6 months of completion of construction of Interconnecting Transmission Owner Interconnection Facilities and Network Upgrades	§ 12.2 of ETU IA
27B	Provide Interconnection Customer final cost invoices associated with the second terminal position, if it is internal to ISO-NE	Interconnecting Transmission Owner	Within 6 months of completion of construction of Interconnecting Transmission Owner Interconnection Facilities and Network Upgrades	§ 12.2 of ETU IA

### 3. Milestones Applicable Solely for CNI Interconnection Service and Long Lead Facility

**Treatment.** In addition to the Milestones above, the following Milestones apply to Interconnection Customers requesting CNI Interconnection Service and/or Long Lead Facility Treatment:

Item No.	Milestone Description	Responsible Party	Date	ETU IP/ETU IA Reference
----------	-----------------------	-------------------	------	-------------------------



1	If Long Lead Facility, all dates by which Critical Path Schedule upgrades will be submitted to System Operator (end date for New Capacity Show of Interest Submission)	Interconnection Customer		§ 3.2.3 of ETU IP
2	If Long Lead Facility, dates by which Long Lead Facility Deposits will be provided to System Operator (each deadline for which New Generating Capacity Resource would be required to provide financial assurance under § III.13.1.9 of the Tariff)	Interconnection Customer		§ 3.2.3 of ETU IP
3	If Long Lead Facility, Capacity Commitment Period (not to exceed the Commercial Operation Date)	Interconnection Customer		§ 1 and 3.2 of ETU IP
4	Counterparty to submit necessary requests for participation in the Forward Capacity Auction associated with the Elective Transmission Upgrade's requested Commercial Operation Date, in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of ETU IP
5	Participate in a CNR Group Study	Interconnection Customer		§ 3.2.1.3 of ETU IP
6	Counterparty to qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of ETU IP
7	Complete a re-study of the applicable Interconnection Study to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request based on the	System Operator		§ 3.2.1.3 of ETU IP

	results of the Forward Capacity Auction or Reconfiguration Auction or bilateral transaction through which the Interconnection Customer's counterparty received a Capacity Supply Obligation			
--	---	--	--	--

## **APPENDIX C TO ETU IA**

### **Interconnection Details**

#### **1. Description of Interconnection:**

This Interconnection Agreement is for an *(insert either Internal ETU or External ETU description from Article 1 of Appendix I)*

The ETU consists of *(insert description from Article 2 of Appendix I)*:

The External Elective Transmission Upgrade that is controllable Merchant Transmission Facility or Other Transmission Facility shall receive *(enter N/A for other ETUs)*:

Network Import Interconnection Service solely for the NI Capability of *[insert amount]* MWs.

Capacity Network Import Interconnection Service for: (i) the NI Capability of *[insert amount]* MWs; and (ii) the CNI Capability of *[insert amount]* MWs.

#### **2. Detailed Description of the Elective Transmission Upgrade:**

*[Insert any other description relating to the Elective Transmission Upgrade, including updates to all the technical data included on Attachment A to Appendix I.]*

#### **3. Other Description of Interconnection Plan and Facilities associated with the Elective Transmission Upgrade:**

#### **4. Other Description of Interconnection Plan and Facilities associated with the first interconnection location:**

**5. Other Description of Interconnection Plan and Facilities associated with the second interconnection location:**

## **APPENDIX D TO ETU IA**

### **Security Arrangements Details**

Infrastructure security of the New England Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day New England Transmission System reliability and operational security. The Commission will expect System Operator, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected to the New England Transmission System to comply with the recommendations offered by the Critical Infrastructure Protection Committee and, eventually, best practice recommendations from NERC. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**APPENDIX E TO ETU IA**  
**Commercial Operation Date**

This Appendix E is a part of the ETU IA between System Operator Interconnecting, Transmission Owner and Interconnection Customer.

[Date]

[*Interconnecting Transmission Owner; Address*]  
[to be supplied]

Transmission Strategy & Services  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Re: \_\_\_\_\_ Elective Transmission Upgrade

Dear \_\_\_\_\_:

On [Date] [Interconnection Customer] has completed Trial Operation of [Elective Transmission Upgrade]. This letter confirms that [Interconnection Customer] commenced commercial operation of [Elective Transmission Upgrade], effective as of [Date plus one day].

Thank you.

[Signature]  
[*Interconnection Customer Representative*]

## **APPENDIX F TO ETU IA**

### **Addresses for Delivery of Notices and Billings Notices:**

System Operator:

Transmission Strategy & Services  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:  
Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

### **Billings and Payments:**

System Operator:

Transmission Strategy & Services  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

**Alternative Forms of Delivery of Notices (telephone, facsimile or email):**

System Operator:

Facsimile: (413) 540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

With copy to:

Facsimile: (413) 535-4024

E-mail: [billingdept@iso-ne.com](mailto:billingdept@iso-ne.com)

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

DUNS Numbers:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner: [To be supplied]



## **SCHEDULE 22**

### **LARGE GENERATOR INTERCONNECTION PROCEDURES**

## **TABLE OF CONTENTS**

SECTION 1.	DEFINITIONS
SECTION 2.	SCOPE, APPLICATION AND TIME REQUIREMENTS.
2.1	Application of Standard Large Generator Interconnection Procedures.
2.2	Comparability
2.3	Base Case Data
2.4	No Applicability to Transmission Service
2.5	Time Requirements
SECTION 3.	INTERCONNECTION REQUESTS
3.1	General
3.2	Type of Interconnection Services and Long Lead Time Facility Treatment
3.3	Utilization of Surplus Interconnection Service
3.4	Valid Interconnection Request
3.5	OASIS Posting
3.6	Coordination with Affected Systems
3.7	Withdrawal
3.8	Identification of Contingent Facilities
SECTION 4.	QUEUE POSITION
4.1	General
4.2	Clustering
4.3	Transferability of Queue Position
4.4	Modifications
SECTION 5.	PROCEDURES FOR TRANSITION
5.1	Queue Position for Pending Requests
5.2	Grandfathering
5.3	New System Operator or Interconnecting Transmission Owner
SECTION 6.	INTERCONNECTION FEASIBILITY STUDY
6.1	Interconnection Feasibility Study Agreement
6.2	Scope of Interconnection Feasibility Study
6.3	Interconnection Feasibility Study Procedures
6.4	Re-Study
SECTION 7.	INTERCONNECTION SYSTEM IMPACT STUDY

7.1	Interconnection System Impact Study Agreement
7.2	Execution of Interconnection System Impact Study Agreement
7.3	Scope of Interconnection System Impact Study
7.4	Interconnection System Impact Study Procedures
7.5	Meeting with Parties
7.6	Re-Study
7.7	Operational Readiness
SECTION 8.	INTERCONNECTION FACILITIES STUDY
8.1	Interconnection Facilities Study Agreement
8.2	Scope of Interconnection Facilities Study
8.3	Interconnection Facilities Study Procedures
8.4	Meeting with Parties
8.5	Re-Study
SECTION 9.	ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT
SECTION 10.	OPTIONAL INTERCONNECTION STUDY
10.1	Optional Interconnection Study Agreement
10.2	Scope of Optional Interconnection Study
10.3	Optional Interconnection Study Procedures
10.4	Meeting with Parties
10.5	Interconnection Agreement Developed Based on Optional Interconnection Study
SECTION 11.	STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA)
11.1	Tender
11.2	Negotiation
11.3	Evidence to be Provided by Interconnection Customer; Execution and Filing of LGIA
11.4	Commencement of Interconnection Activities
SECTION 12.	CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES
12.1	Schedule
12.2	Construction Sequencing
SECTION 13.	MISCELLANEOUS
13.1	Confidentiality
13.2	Delegation of Responsibility
13.3	Obligation for Study Costs

13.4 Third Parties Conducting Studies

13.5 Disputes

13.6 Local Furnishing Bonds

## **APPENDICES TO LGIP**

APPENDIX 1 INTERCONNECTION REQUEST

APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT

APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT

APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT

APPENDIX 6 LARGE GENERATOR INTERCONNECTION AGREEMENT

APPENDIX 7 INTERCONNECTION PROCEDURES FOR WIND GENERATION

## **SECTION I. DEFINITIONS**

The definitions contained in this section are intended to apply in the context of the generator interconnection process provided for in this Schedule 22 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of generator interconnections under this Schedule 22. Capitalized terms in Schedule 22 that are not defined in this Section I shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF and the Non-PTF.

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**At-Risk Expenditure** shall mean money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (i) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and surveys, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** shall have the meaning specified in Section 2.3.

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability data bases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility

seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispach of other Capacity Network Resources or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** shall mean that portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** shall mean the MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Large Generating Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.



**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise. Confidential

Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades associated with an Interconnection Request with a higher Queue Position or a transmission project that is planned or proposed for the New England Transmission System upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission

Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the Standard Large Generator Interconnection Agreement to possess black start capability.

**Engineering & Procurement ("E&P") Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to

exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** shall mean a Transmission Owner that owns, leases or otherwise possesses an interest, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Large Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Generating Facility with the Administered Transmission System under the Standard Large Generator Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of an existing Generation Facility; (iv) make a Material Modification to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System; (v) commence participation in the wholesale markets by an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service for all or part of a Generating Facility's capability. Interconnection Request shall not include a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** shall mean the service provided by the System Operator, and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional Interconnection Study described in the Standard Large Generator Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection

Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other Affected System, the scope of which is described in Section 7 of the Standard Large Generator Interconnection Procedures. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a maximum gross capability at or above zero degrees F of more than 20 MW.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff, respectively.

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party’s performance, or non-performance of its obligations under the Standard Large Generator Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2.2(a) of the Tariff.

**Material Modification** shall mean: (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A (and Attachment A-1, if applicable) to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer, that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Initial Synchronization Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer's control; (iv) except as provided in Section 3.2.3.4, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard ("NC Interconnection Standard")** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.



**Network Resource (“NR”)** shall mean the portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** shall mean the MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s NR Interconnection Service shall be solely for the megawatt amount of the NR Capability requested pursuant to Section 3.1 of this LGIP. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Large Generating Facility to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Large Generator Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Standard Large Generator Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer’s Interconnection Facilities connect to the Interconnecting Transmission Owner’s Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Provisional Interconnection Service** shall mean Network Resource Interconnection Service provided by the System Operator, and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability from the Generating Facility at the Point of Interconnection on a limited and temporary basis, pursuant to the terms of the Provisional Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Provisional Large Generator Interconnection Agreement** shall mean the Interconnection Agreement for Provisional Interconnection Service established between the System Operator, the Interconnecting Transmission Owner, and the Interconnection Customer. This agreement shall take the form of the Standard Large Generator Interconnection Agreement, modified for provisional purposes.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a "higher-queued" Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as "lower-queued."

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for which new interconnection is sought; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for which new interconnection is sought; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for which new interconnection is sought; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for which new interconnection is sought; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If the System Operator, Interconnecting Transmission Owner, and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the System Operator must provide the Interconnection Customer a written technical explanation outlining why the System Operator does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**Standard Large Generator Interconnection Agreement (“LGIA”)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, that is included in this Schedule 22 to the Tariff.

**Standard Large Generator Interconnection Procedures (“LGIP”)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in this Schedule 22 to the Tariff.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this LGIP.

**Surplus Interconnection Service** shall mean a form of Interconnection Service that allows an Interconnection Customer to use any Unused Capability of Interconnection Service established in an Interconnection Agreement for an existing Generating Facility that has achieved Commercial Operation, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the same Point of Interconnection would remain the same.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Unused Capability** shall mean: (i) in the case of NR Interconnection Service at an existing, commercial Generating Facility, the MW quantity as determined by the Original Interconnection Customer (as defined in Section 3.3 of the LGIP), not to exceed the existing, commercial Generating Facility’s NR Interconnection Service; and (ii) in the case of CNR Interconnection Service at an existing, commercial Generating Facility, for Summer, the Summer CNR Capability minus the latest Summer Qualified Capacity, and for Winter, the Winter CNR Capability minus the latest Winter Qualified Capacity.

## **SECTION 2. SCOPE, APPLICATION AND TIME REQUIREMENTS.**

### **2.1 Application of Standard Large Generator Interconnection Procedures.**

The LGIP and LGIA shall apply to Interconnection Requests pertaining to Large Generating Facilities. Except as expressly provided in the LGIP and LGIA, nothing in the LGIP or LGIA shall be construed to limit the authority or obligations that the Interconnecting Transmission Owner or System Operator, as applicable, has with regard to ISO New England Operating Documents.

## **2.2. Comparability.**

The System Operator shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this LGIP. The System Operator and Interconnecting Transmission Owner will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Generating Facilities are owned by the Interconnecting Transmission Owner, its subsidiaries or Affiliates, or others.

## **2.3 Base Case Data.**

System Operator shall maintain Base Case power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists on a secured location on the System Operator's website. For the purposes of this provision, Base Case Data may include the electromagnetic transient network model that does not include proprietary electromagnetic transient equipment models. System Operator shall provide access to such information located on a secured location on the System Operator's website, subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy as well as any other applicable requirement under Applicable Laws and Regulations regulating disclosure or confidentiality of such information. System Operator shall maintain network models and underlying assumptions on a secured location on the System Operator's website. Such network models and underlying assumptions should reasonably represent those used during the most recent Interconnection Study and be representative of current system conditions as of the most recent Interconnection Study. The databases and lists addressed in this Section 2.3, hereinafter referred to as Base Cases, shall include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. The Base Cases shall also include generation projects that are not participating in the System Operator's interconnection process, but are expected to achieve approval pursuant to Section I.3.9 of the Tariff within 90 days from the date of the creation of the Base Cases and for which steady state, short circuit and stability models for the generation projects and any associated system upgrades have been provided to the System Operator. The Interconnection Customer, where

applicable, shall provide Base Case Data to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

System Operator shall provide a link to the secured location on its website that contains the information required under this Section 2.3 on System Operator's OASIS site. System Operator is permitted to require that Interconnection Customers or their third party consultants, OASIS site users, and users of the secured location on System Operator's website sign a confidentiality agreement before the release of information governed by Section 13.1 or the ISO New England Information Policy, or the release of any other information that is commercially sensitive or Critical Energy Infrastructure Information.

#### **2.4 No Applicability to Transmission Service.**

Nothing in this LGIP shall constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

#### **2.5 Time Requirements.**

Parties that must perform a specific obligation under a provision of the Standard Large Generator Interconnection Procedure or Standard Large Generator Interconnection Agreement within a specified time period shall use Reasonable Efforts to complete such obligation within the applicable time period. A Party may, in the exercise of reasonable discretion and within the time period set forth by the applicable procedure or agreement, request that the relevant Party consent to a mutually agreeable alternative time schedule, such consent not to be unreasonably withheld.

### **SECTION 3. INTERCONNECTION REQUESTS.**

#### **3.1 General.**

To initiate an Interconnection Request, an Interconnection Customer must comply with all of the requirements set forth in Section 3.4.1. The Interconnection Customer shall submit a separate Interconnection Request for each site and may submit multiple Interconnection Requests for a single site. The Interconnection Customer must comply with the requirements specified in Section 3.4.1 for each Interconnection Request even when more than one request is submitted for a single site.

Within three (3) Business Days after its receipt of a valid Interconnection Request, System Operator shall submit a copy of the Interconnection Request to Interconnecting Transmission Owner.

At Interconnection Customer's option, System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the Interconnection Feasibility Study Agreement, or the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

System Operator shall consider requests for Interconnection Service below the Large Generating Facility capability. An Interconnection Customer that submits an Interconnection Request for Interconnection Service below the Large Generating Facility capability shall include in the Interconnection Request the proposed control technologies to restrict the Large Generating Facility's output to the requested Interconnection Service levels. These requests for Interconnection Service shall be studied at the level of Interconnection Service requested for purposes of determining necessary Interconnection Facilities, Network Upgrades, and associated costs, and the requests shall be studied at the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the facility's output and the safety and reliability of the system, with the study costs borne by the Interconnection Customer. Interconnection Customers may be subject to additional control technologies as well as testing and validation of those technologies consistent with Article 6 of the LGIA. The necessary control technologies and protection systems shall be established in Appendix C of the executed, or requested to be filed unexecuted, LGIA.

All deposits that must be submitted to the System Operator under this LGIP must be delivered to the System Operator's bank account by electronic transfer within the period specified in the respective provision. A deposit will not be considered received until it is in the System Operator's bank account.

### **3.2 Type of Interconnection Services and Long Lead Time Facility Treatment**

At the time the Interconnection Request is submitted, the Interconnection Customer must request either CNR Interconnection Service or NR Interconnection Service, as described in Sections 3.2.1 and 3.2.2 below. An Interconnection Customer that meets the requirements to obtain CNR Interconnection Service shall obtain NR Interconnection Service up to the NR Capability upon completion of all requirements for NR Interconnection Service, including all necessary upgrades. Upon completion of all requirements for the CNR Interconnection Service, the Interconnection Customer shall also receive CNR Interconnection Service for CNR Capability. An Interconnection Customer that meets the requirements to obtain NR Interconnection Service shall receive NR Interconnection Service for the Interconnection Customer's NR Capability. At the time the Interconnection Request is submitted, the Interconnection Customer may also request Long Lead Facility treatment in accordance with Section 3.2.3.

### **3.2.1 Capacity Network Resource Interconnection Service**

#### **3.2.1.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which CNRs are interconnected under the CC Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Large Generating Facility to be designated as a CNR, and to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the CNR Capability or as otherwise provided in the Tariff, on the same basis as existing CNRs, and to be studied as a CNR on the assumption that such a designation will occur.

#### **3.2.1.2 The Studies.**

All Interconnection Studies for CNR Interconnection Service shall assure that the Interconnection Customer's Large Generating Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the unit. The CNR Group Study for CNR Interconnection Service shall assure that the Interconnection Customer's Large Generating Facility can be interconnected in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other CNRs and Elective Transmission



Upgrades with CNI Interconnection Service, in accordance with the CC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

### **3.2.1.3 Milestones for CNR Interconnection Service.**

In addition to the requirements set forth in this LGIP, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service shall complete the following milestones prior to receiving CNR Interconnection Service for the CNR Capability, such milestones to be specified in Appendix B of the LGIA, as either completed or to be completed: (i) submit the necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date (except as modified pursuant to Sections 3.2.3 or 4.4 of this LGIP), in accordance with the provisions of Section III.13 of the Tariff; (ii) participate in a CNR Group Study for the Forward Capacity Auction associated with the requested Generating Facility's Commercial Operation Date; (iii) qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff; and (iv) complete a re-study of the applicable Interconnection Study and CNR Group Study after the Forward Capacity Auction, Reconfiguration Auction, or bilateral transaction through which the Interconnection Customer received a Capacity Supply Obligation to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request. The re-study shall include those CNR Interconnection Service or CNI Interconnection Service Interconnection Requests with a higher Queue Position that cleared and shall exclude any upgrades that are no longer necessary as a result of existing capacity that will be retired as of the start of the Capacity Commitment Period for which the resource has received a Capacity Supply Obligation. With respect to (iv) above, if an Interconnection Study Agreement has been executed, the Interconnection Study associated with the Interconnection Study Agreement shall include the necessary analysis that would otherwise have been performed in a re-study. If the original Interconnection Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Study Agreement. If an LGIA has been either executed or filed with the Commission in unexecuted form, then the last Interconnection Study completed for the Interconnection Customer under this LGIP shall be subject to re-study. The Appendices to the LGIA shall be amended (pursuant to Article 30 of the LGIA) to reflect CNR Capability and the results of the re-study.

### **3.2.2 Network Resource Interconnection Service**

#### **3.2.2.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which Network Resources are interconnected under the NC Interconnection Standard. NR Interconnection Service allows the Interconnection Customer's Large Generating Facility to participate in the New England Markets, in accordance with the provisions of Market Rule 1, Section III of the Tariff, up to the net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as other Network Resources. Notwithstanding the above, the portion of a Large Generating Facility that has been designated as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNR Interconnection Service.

#### **3.2.2.2 The Studies.**

The Interconnection Studies for an Network Resource shall assure that the Interconnection Customer's Large Generating Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the unit, in accordance with the NC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

#### **3.2.2.3 Milestones for NR Interconnection Service.**

An Interconnection Customer with an Interconnection Request for NR Interconnection Service shall complete the requirements in this LGIP prior to receiving NR Interconnection Service.

### **3.2.3 Long Lead Time Facility Treatment**

#### **3.2.3.1 Treatment of Long Lead Facilities.**

Long Lead Facilities receive the treatment described herein in connection with the associated request of the Interconnection Customer for CNR Interconnection Service for its Large Generating Facility or CNI Interconnection Service for its External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility. Long Lead Facility treatment provides for the Interconnection Customer's Generating Facility or controllable Merchant Transmission Facility or Other Transmission Facility External ETU, after the completion of the Interconnection System Impact Study, to be modeled in the Base Cases for the next CNR Group Study to determine whether the Long Lead Facility would have qualified or enabled the qualification of an Import Capacity Resource to participate in the Forward Capacity Auction associated with that CNR Group Study, in accordance with Section III.13.1.2 of the Tariff, but for the Long Lead Facility's development cycle (which shall include development of required transmission upgrades). If the Long Lead Facility is deemed to qualify or have enabled an associated Import Capacity Resource to qualify, the Long Lead Facility shall be included in the re-study pursuant to Section 3.2.1.3(iv) in order to determine the facilities and upgrades that would be necessary in order to accommodate the Interconnection Request of the Long Lead Facility, and for which costs the Interconnection Customer must be responsible. In order to maintain Long Lead Facility status, the Interconnection Customer must commit to the completion of these facilities and upgrades in time to allow the Long Lead Facility to achieve its Commercial Operation Date by the start of the associated Capacity Commitment Period. In addition, the Long Lead Facility will be treated as a New Generating Capacity Resource in the case of a Generating Facility or as if an Import Capacity Resource associated with the Long Lead Facility cleared in the case of an External ETU for the sole purpose of inclusion of the Long Lead Facility in the CNR Group Studies for the Forward Capacity Auctions that precede the Forward Capacity Auction for the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation. If an earlier-queued Generating Facility seeking CNR Interconnection Service or an Import Capacity Resource associated with an Elective Transmission Upgrade that is seeking CNI Interconnection Service obtains a Capacity Supply Obligation in a Forward Capacity Auction prior to or simultaneous with the Forward Capacity Auction in which the Long Lead Facility or its contractual counterparty in the case of an Elective Transmission Upgrade obtains a Capacity Supply Obligation, the Long Lead Facility will be re-studied in order to determine whether any additional facilities and upgrades to those identified prior to the CNR Group Study must be completed, at

the Interconnection Customer's cost, prior to its Commercial Operation Date. A Long Lead Facility's cost responsibility for the facilities necessary to accommodate the Interconnection Request shall not be impacted by a Generating Facility or an External ETU with a Queue Position lower than the Long Lead Facility or its counterparty in the case of an External ETU that clears in a Forward Capacity Auction, in accordance with Section III.13.2 of the Tariff, prior to the clearance of the Long Lead Facility.

### **3.2.3.2 Request for Long Lead Facility Treatment.**

An Interconnection Customer requesting CNR Interconnection Service for its proposed Generating Facility or CNI Interconnection Service for its proposed controllable Merchant Transmission Facility or Other Transmission Facility External ETU, which the Interconnection Customer projects to have a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) may elect or request Long Lead Facility treatment in the following manner:

**(a)** An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service equal to or greater than 100 MW may elect Long Lead Facility treatment at the time the Interconnection Request is submitted, together with the critical path schedule and deposits required in Section 3.2.3.3.

**(b)** An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service under 100 MW may request Long Lead Facility treatment by submitting a written request to the System Operator for its review and approval, explaining why the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU cannot achieve Commercial Operation by the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for Long Lead Facility treatment is made), together with the critical path schedule and deposits required in Section 3.2.3.3. In reviewing the request, the System Operator shall evaluate the feasibility of the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU achieving Commercial Operation to meet an earlier Capacity Commitment Period based on the information provided in the request and the critical path schedule submitted pursuant to Section 3.2.3.3, in a manner

similar to that performed under Section III.13.3.2 of the Tariff. Within forty-five (45) Business Days after its receipt of the request for Long Lead Facility treatment, the System Operator shall notify the Interconnection Customer in writing whether the request has been granted or denied. If the System Operator determines that the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU can achieve a Commercial Operation Date prior to the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction, the Interconnection Customer's request shall be denied. The dispute resolution provisions of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU are not available for disputes or claims associated with the ISO's determination to deny an Interconnection Customer's request for Long Lead Facility treatment.

(c) An Interconnection Customer that did not request Long Lead Facility treatment at the time the Interconnection Request was submitted, may thereafter submit a request for treatment as a Long Lead Facility, together with the critical path schedule and deposits required in Section 3.2.3.3 and, if applicable, a request for an extension of the Commercial Operation Date specified in the Interconnection Request in accordance with Sections 4.4.4 and 4.4.5. A request for Long Lead Facility treatment that is submitted after the initial Interconnection Request will not be eligible to participate in any Forward Capacity Auction prior to the Forward Capacity Auction associated with the extended Commercial Operation Date. The Long Lead Facility will be modeled in the Base Cases for the CNR Study Group associated with the near term Forward Capacity Auction unless that CNR Study Group is underway, in which case the Long Lead Facility will be modeled in the next CNR Study Group.

### **3.2.3.3 Critical Path Schedule and Deposits for Long Lead Facility Treatment.**

At the time an Interconnection Customer submits an election or request for Long Lead Facility treatment, the Interconnection Customer must submit, together with the request:

**(1) Critical Path Schedule.** A critical path schedule, in writing, for the Long Lead Facility (with a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) that meets the requirements set forth in Section III.13.1.1.2.2.2 of the Tariff. The Interconnection Customer must submit annually, in writing, an updated critical path schedule to the System Operator by the closing deadline of each New Capacity Show of Interest

Submission Window that precedes the Forward Capacity Auction associated with the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation, prior to the inclusion of the Long Lead Facility in the Base Case for the CNR Group Study associated with the corresponding New Capacity Show of Interest Submission Window. With its annual update, for each critical path schedule milestone achieved since the submission of the previous critical path schedule update, the Interconnection Customer must include in the critical path update documentation demonstrating that the milestone has been achieved by the date indicated and as otherwise described in the critical path schedule.

## **(2) Long Lead Facility Deposits.**

**(a) Deposits.** In addition to the deposits required elsewhere in the LGIP in the case of a Generating Facility or the ETU IP for External ETU, at the time of its request for Long Lead Facility treatment, in accordance with Section 3.2.3.3, and by each deadline for which a New Generating Capacity Resource is required to provide financial assurance under Section III.13.1.9.1 of the Tariff, the Interconnection Customer must provide a separate deposit in the amount of  $0.25 * (\text{Forward Capacity Auction Starting Price } (\$/\text{kW-mo}) / 2) * \text{requested CNR Capability or CNI Capability}$ . For each calculation of the deposit, the System Operator shall use the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction at the time of that calculation, pursuant to Section III.13.2.4 of the Tariff, or the Forward Capacity Auction Starting Price for the previous Forward Capacity Auction in the case where the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction has not yet been calculated. The total amount of deposits shall not exceed the Non-Commercial Capacity Financial Assurance Amount that the Long Lead Facility would be required to provide if the Long Lead Facility or its counterparty cleared in the upcoming Forward Capacity Auction, in accordance with Section III.13.1.9.1 of the Tariff. The Long Lead Facility deposits will be fully refunded (with interest to be calculated in accordance with Section 3.7) (i) if the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within thirty (30) Calendar Days of the Scoping Meeting or of the completion of the System Impact Study (including restudy of the System Impact Study), pursuant to Section 7, or (ii) once the Long Lead Facility or its counterparty clears in a Forward Capacity Auction.

**(b) Reductions.** Ten (10) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) after the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear in the Forward Capacity Auction that follows the first Forward Capacity Auction for which the Long Lead Facility or its counterparty could qualify based on the Commercial Operation Date specified in the initial critical path schedule for the Long Lead Facility. An additional five (5) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) following each subsequent Forward Capacity Auction in which the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear such Forward Capacity Auction, not to exceed the maximum period allowed under Sections 3.4.1, 4.4.4 and 4.4.5. The non-refundable portions of the deposits shall be credited to the revenue requirements under Schedule 1 of Section IV of the Tariff.

#### **3.2.3.4 Withdrawal and Refunds After Expenditures for Upgrades.**

An Interconnection Customer that provides documentation in the critical path schedule update to be submitted in accordance with Section 3.2.3.3(1), showing expenditures of the required amounts for upgrades identified in the Interconnection Studies for the Long Lead Facility, may submit a withdrawal of the Interconnection Request for the Long Lead Facility, in accordance with Section 3.7, at any time up to thirty (30) Calendar Days, after the Long Lead Facility's or its counterparty's failure to clear in any Forward Capacity Auction. In such instance, the Interconnection Customer shall receive a refund from the System Operator of the Long Lead Facility deposits (with interest to be calculated in accordance with Section 3.7) as adjusted pursuant to 3.2.3.3(2), if appropriate, and from the Interconnecting Transmission Owner a refund of the payments for the upgrades that exceed the costs incurred by the Interconnecting Transmission Owner. If the Interconnection Customer withdraws only its election or request for Long Lead Facility treatment, such withdrawal will be considered a Material Modification and the Long Lead Facility will lose its Queue Position unless its withdrawal occurs within one of the thirty (30)-day periods described in Section 3.2.3.3(2) of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU.

#### **3.2.3.5 Additional Requirements to Maintain Long Lead Facility Treatment.**

An Interconnection Customer with a Long Lead Facility must begin payment as required by the transmission expenditure schedule for the transmission upgrade costs that have been identified in the pertinent Interconnection Studies. The Interconnection Request for CNR Interconnection Service shall be deemed withdrawn under Section 3.7 if the Interconnection Customer fails to comply with the requirements for Long Lead Facility treatment, including the milestones specified in Section 3.2.1.4. In this circumstance, the conditions specified in an Interconnection Agreement for a Generating Facility seeking CNR Interconnection Service or External ETU seeking CNI Interconnection Service that had an Interconnection Request of a Queue Position lower than the Long Lead Facility, but cleared (in the case of the Elective Transmission Upgrade, the Import Capacity Resource) in a Forward Capacity Auction prior to the Long Lead Facility, shall be removed.

#### **3.2.3.6 Participation in Earlier Forward Capacity Auctions.**

An Interconnection Customer with a Long Lead Facility may, without loss of Queue Position, elect to participate in an earlier Forward Capacity Auction than originally anticipated, but only if the election to accelerate is made to the System Operator in writing within thirty (30) Calendar Days of the Scoping Meeting or within thirty (30) Calendar Days of the completion of the System Impact Study (but before the Long Lead Facility and the results of the associated System Impact Study are incorporated into the Base Cases). Otherwise, such an election shall be considered a Material Modification.

### **3.3 Utilization of Surplus Interconnection Service.**

Surplus Interconnection Service allows an existing Interconnection Customer whose Generating Facility is already interconnected to the Administered Transmission System and is in Commercial Operation to utilize or transfer Surplus Interconnection Service at the existing Generating Facility's existing Point of Interconnection. For purposes of Surplus Interconnection Service, the existing Interconnection Customer is referred to as the "Original Interconnection Customer," and the entity requesting Surplus Interconnection Service is referred to as the "Surplus Interconnection Customer." The Original Interconnection Customer or, with written consent of the Original Interconnection Customer, one of its affiliates shall have priority to utilize Surplus Interconnection Service. If the Original Interconnection Customer or one of its affiliates does not exercise this priority, then the Surplus Interconnection Service may be utilized by a third party of the Original Interconnection Customer's choosing and with the Original Interconnection Customer's written consent.



Surplus Interconnection Service may be available for any Unused Capability of Interconnection Service established in the Interconnection Agreement for the Original Interconnection Customer's Generating Facility. If the Interconnection Agreement for the Original Interconnection Customer's Generating Facility is for CNR Interconnection Service, any Surplus Interconnection Service may be for CNR Interconnection Service or NR Interconnection Service. If the Interconnection Agreement for the Original Interconnection Customer's Generating Facility is for NR Interconnection Service, any Surplus Interconnection Service shall be for NR Interconnection Service. Surplus Interconnection Service is not applicable when a new Interconnection Request for Interconnection Service or Network Upgrades would be required to implement the proposed change to the Original Interconnection Customer's Generating Facility. Surplus Interconnection Service is also not available for a retirement or repowering of the Original Interconnection Customer's Generating Facility.

The Original Interconnection Customer shall specify the amount of Unused Capability that is available for use by the Surplus Interconnection Customer's Generating Facility. The total output of the Original Interconnection Customer's Generating Facility plus the Surplus Interconnection Customer's Generating Facility behind the same Point of Interconnection shall be limited to the maximum total amount of Interconnection Service granted to the Original Interconnection Customer as established in the Interconnection Agreement for the Original Interconnection Customer's Generating Facility. Control technology to restrict the total output of the Original Interconnection Customer's and Surplus Interconnection Customer's Generating Facilities shall be required in the case where the sum of the maximum output of the Original Interconnection Customer's Generating Facility plus the maximum output of the Surplus Interconnection Customer's Generating Facility exceeds the total amount of Interconnection Service established in the Original Interconnection Customer's Interconnection Agreement. Surplus Interconnection Service shall only be available at the existing Point of Interconnection of the Original Interconnection Customer's Generating Facility.

### **3.3.1 Surplus Interconnection Service Request**

An Original Interconnection Customer or, with the consent of the Original Interconnection Customer, its affiliate or a third party of the Original Interconnection Customer's choosing may request Surplus Interconnection Service by submitting to the System Operator a completed Surplus Interconnection Service Request Application in the form contained in Attachment C to

Appendix 1 of the LGIP. The Surplus Interconnection Service Request Application shall be accompanied by the Original Interconnection Customer's written consent for the Surplus Interconnection Customer's use of Unused Capability for Surplus Interconnection Service, and the technical data called for in the form.

Studies for Surplus Interconnection Service may consist of reactive power, short circuit/fault duty, stability analyses, and/or other appropriate studies. Steady-state (thermal/voltage) analyses may be performed as necessary to ensure that all required reliability conditions are studied. The study shall consider the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the total output of the Original Interconnection Customer's and Surplus Interconnection Customer's Generating Facilities. If the Surplus Interconnection Service was not studied under off-peak conditions, off-peak steady state analyses shall be performed to the required level necessary to demonstrate reliable operation of the Surplus Interconnection Service. If the original Interconnection System Impact Study is not available for Surplus Interconnection Service, both off-peak and peak analysis may need to be performed for the existing Generating Facility associated with the request for Surplus Interconnection Service. The reactive power, short circuit/fault duty, stability, and steady-state analyses for Surplus Interconnection Service will identify any additional Interconnection Facilities and/or Network Upgrades necessary. Any analyses shall be performed at the Surplus Interconnection Customer's expense.

The Interconnection Agreement for the Original Interconnection Customer's Generating Facility shall be replaced by a new agreement among the System Operator, Interconnecting Transmission Owner, Original Interconnection Customer, and Surplus Interconnection Customer. The agreement shall be in the form of the most currently effective LGIA, modified to reflect the Surplus Interconnection Customer's Generating Facility and the amount of, and the terms for the use of, the Surplus Interconnection Service. The agreement shall be developed and negotiated in accordance with Section 11 of the LGIP, at the Surplus Interconnection Customer's expense.

### **3.4 Valid Interconnection Request.**

#### **3.4.1 Initiating an Interconnection Request.**

To initiate and establish a valid Interconnection Request, Interconnection Customer must submit all of the following to the System Operator in the manner specified in Appendix 1 Interconnection Request to this

LGIP: (i) an initial deposit of \$50,000, (ii) a completed application in the form of Appendix 1, (iii) all information and deposits required under Section 3.2, and (iv) in the case of a request for CNR Interconnection Service, demonstration of Site Control or, in the case of a request for NR Interconnection Service, demonstration of Site Control or a posting of an additional deposit of \$10,000. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Large Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. The portions of the deposit of \$50,000 that have not been applied as provided in this Section 3.4.1 shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry Deadline, (iii) the Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in relative order with any other Interconnection Request also requesting to be re-queued pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit of \$50,000 (and any study-related deposits, if any have been submitted) shall be applied toward the re-queued Interconnection Request's initial deposit of \$50,000 and any remaining balance will be refunded, or (iv) if the Interconnection Customer executes an LGIA. Otherwise, any unused balance of the deposit of \$50,000 shall be non-refundable and applied on a pro-rata basis to offset costs incurred by Interconnection Customers with lower Queue Positions that are subject to re-study, as determined by the System Operator in accordance with the provisions of this LGIP, as a result of the withdrawal of an Interconnection Request with a higher Queue Position.

The deposit of \$50,000 shall be applied toward the costs incurred by the System Operator associated with the Interconnection Request and Long Lead Facility treatment, as well as, the costs of the Interconnection Feasibility Study and/or the Interconnection System Impact Study, including the cost of developing the study agreements and their attachments, and the cost of developing the LGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit of \$50,000 also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS.

If, in the case of a request for NR Interconnection Service, the Interconnection Customer demonstrates Site Control within the cure period specified in Section 3.4.3 after submitting its Interconnection Request, the additional deposit of \$10,000 shall be refundable; otherwise, that deposit shall be applied as provided in Section 3.1, including, toward the costs of any Interconnection Studies pursuant to the Interconnection Request, the cost of developing the study agreement(s) and associated attachment(s), and the cost of developing the LGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. The portions of the deposit of \$10,000 that have not been applied as provided in this Section 3.4.1 also shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry Deadline, (iii) the Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit shall be applied toward the re-queued Interconnection Request in lieu of Site Control for NR Interconnection Service, or (iv) if the Interconnection Customer executes an LGIA.

The expected Initial Synchronization Date of the new Large Generating Facility, of the increase in capacity of the existing Generating Facility, or of the implementation of the Material Modification to the existing Generating Facility shall not exceed seven (7) years from the date the Interconnection Request is received by the System Operator, unless the Interconnection Customer demonstrates that such time required to actively engineer, permit and construct the new Large Generating Facility or increase in capacity of the existing Generating Facility or implement the Material Modification to the existing Generating Facility will take longer than the seven year period. Upon such demonstration, the Initial Synchronization Date may succeed the date the Interconnection Request is received by the System Operator by a period of greater than seven (7) years so long as the Interconnection Customer, System Operator, and Interconnecting Transmission Owner agree, such agreement shall not be unreasonably withheld.

### **3.4.2 Acknowledgment of Interconnection Request.**

System Operator shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the

acknowledgement. With the System Operator's acknowledgement of a valid Interconnection Request, the System Operator shall provide to the Interconnection Customer an Interconnection Feasibility Study Agreement in the form of Appendix 2 or an Interconnection System Impact Study Agreement in the form of Appendix 3.

#### **3.4.3 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid Interconnection Request until all items in Section 3.4.1 have been received by the System Operator. If an Interconnection Request fails to meet the requirements set forth in Section 3.4.1, the System Operator shall notify the Interconnection Customer within five (5) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide the System Operator the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Section 3.4.3 shall be treated in accordance with Section 3.7.

#### **3.4.4 Scoping Meeting.**

Within ten (10) Business Days after receipt of a valid Interconnection Request, System Operator shall establish a date agreeable to Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, for a Scoping Meeting, and such date shall be no later than thirty (30) Calendar Days from receipt of the valid Interconnection Request, unless otherwise mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be (i) to discuss the estimated timeline for completing all applicable Interconnection Studies, and alternative interconnection options, (ii) to exchange pertinent information including any transmission data that would reasonably be expected to impact such interconnection options, (iii) to analyze such information, (iv) to determine the potential feasible Points of Interconnection, and (v) to discuss any other information necessary to facilitate the administration of the Interconnection Procedures. A PSCAD model is required for all wind and inverter-based Large Generating Facilities. If a PSCAD model is required for other Large Generating Facility types, the Parties shall discuss this at the Scoping Meeting. If the Interconnection Customer provided the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) with the Interconnection Request, the Parties shall discuss the detailed project design at the Scoping Meeting.

The Parties will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) information regarding general short circuit issues, (iv) general voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. The Parties will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 6.1, and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

Unless the Interconnection Request has been identified to be included in a CRPS or eligible for inclusion in a CSIS, within five (5) Business Days following the Scoping Meeting Interconnection Customer shall notify the System Operator, in writing, (i) of its election to pursue the Interconnection Feasibility Study or the Interconnection System Impact Study; (ii) if electing to pursue the Interconnection Feasibility Study, which of the alternate study scopes is being selected pursuant to Section 6.2; and (iii) the Point of Interconnection and any reasonable alternative Point(s) of Interconnection for inclusion in the attachment to the Interconnection Feasibility Study Agreement, or the Point of Interconnection for inclusion in the attachment to the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

### **3.5 OASIS Posting.**

#### **3.5.1**

The System Operator will maintain on its OASIS a list of all Interconnection Requests in its Control Area. The list will identify, for each Interconnection Request: (i) the maximum summer and winter megawatt electrical output; (ii) the location by county and state; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected Initial Synchronization Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of Interconnection Service being requested (i.e., CNR Interconnection Service or NR Interconnection Service); and (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Generating Facility to be constructed (combined cycle, base load or combustion turbine and fuel type); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. Except in the case of an Affiliate, the list

will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an LGIA or requests that the System Operator and Interconnecting Transmission Owner jointly file an unexecuted LGIA with the Commission. Before participating in a Scoping Meeting with an Interconnection Customer that is also an Affiliate, the Interconnecting Transmission Owner shall post on OASIS an advance notice of its intent to do so. The System Operator shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Study reports shall be posted to the System Operator's OASIS site subsequent to the meeting between the System Operator, Interconnecting Transmission Owner, and Interconnection Customer to discuss the applicable study results. The System Operator shall also post any known deviations in the Large Generating Facility's Initial Synchronization Date.

### **3.5.2 Requirements to Post Interconnection Study Metrics**

The System Operator will maintain on its website summary statistics related to processing Interconnection Studies pursuant to Interconnection Requests, updated quarterly. If the System Operator posts this information on its website, a link to the information must be provided on the System Operator's OASIS site. For each calendar quarter, the System Operator must calculate and post the information detailed in Sections 3.5.2.1 through 3.5.2.4.

#### **3.5.2.1 Interconnection Feasibility Studies Processing Time.**

(A) Number of Interconnection Requests that had Interconnection Feasibility Studies completed for the System Operator's Administered Transmission System during the reporting quarter,

(B) Number of Interconnection Requests that had Interconnection Feasibility Studies completed for the System Operator's Administered Transmission System during the reporting quarter that were completed more than ninety (90) Calendar Days after receipt by System Operator of the Interconnection Customer's executed Interconnection Feasibility Study Agreement,

(C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Interconnection Feasibility Studies where such Interconnection Requests had executed Interconnection Feasibility Study Agreements received by System Operator more than ninety (90) Calendar Days before the reporting quarter end,

(D) Mean time (in days), Interconnection Feasibility Studies completed for the System Operator's Administered Transmission System during the reporting quarter, from the date when System Operator received the executed Interconnection Feasibility Study Agreement to the date when System Operator provided the completed Interconnection Feasibility Study to the Interconnection Customer,

(E) Percentage of Interconnection Feasibility Studies exceeding ninety (90) Calendar Days to complete this reporting quarter, calculated as the sum of 3.5.2.1(B) plus 3.5.2.1(C) divided by the sum of 3.5.2.1(A) plus 3.5.2.1(C).

### **3.5.2.2 Interconnection System Impact Studies Processing Time.**

(A) Number of Interconnection Requests that had Interconnection System Impact Studies completed for the System Operator's Administered Transmission System during the reporting quarter,

(B) Number of Interconnection Requests that had Interconnection System Impact Studies completed for the System Operator's Administered Transmission System during the reporting quarter that were completed more than two hundred and seventy (270) Calendar Days after receipt by System Operator of the Interconnection Customer's executed Interconnection System Impact Study Agreement,

(C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete System Impact Studies where such Interconnection Requests had executed Interconnection System Impact Study Agreements received by System Operator more than two hundred and seventy (270) Calendar Days before the reporting quarter end,

(D) Mean time (in days), Interconnection System Impact Studies completed for the System Operator's Administered Transmission System during the reporting quarter, from the date when System Operator received the executed Interconnection System Impact Study Agreement to the date when System Operator provided the completed Interconnection System Impact Study to the Interconnection Customer,



(E) Percentage of Interconnection System Impact Studies exceeding two hundred and seventy (270) Calendar Days to complete this reporting quarter, calculated as the sum of 3.5.2.2(B) plus 3.5.2.2(C) divided by the sum of 3.5.2.2(A) plus 3.5.2.2(C).

### **3.5.2.3 Interconnection Facilities Studies Processing Time.**

(A) Number of Interconnection Requests that had Interconnection Facilities Studies that are completed for the System Operator's Administered Transmission System during the reporting quarter,

(B) Number of Interconnection Requests that had Interconnection Facilities Studies that are completed for the System Operator's Administered Transmission System during the reporting quarter that were completed more than ninety (90) Calendar Days for no more than +/- 20 percent cost estimate or one hundred eighty (180) Calendar Days for +/- 10 percent cost estimate after receipt by System Operator of the Interconnection Customer's executed Interconnection Facilities Study Agreement,

(C) At the end of the reporting quarter, the number of active valid Interconnection Requests with ongoing incomplete Interconnection Facilities Studies where such Interconnection Requests had executed Interconnection Facilities Studies Agreement received by System Operator more than ninety (90) Calendar Days for no more than +/- 20 percent cost estimate or one hundred eighty (180) Calendar Days for +/- 10 percent cost estimate before the reporting quarter end,

(D) Mean time (in days), for Interconnection Facilities Studies completed for the System Operator's Administered Transmission System during the reporting quarter, calculated from the date when System Operator received the executed Interconnection Facilities Study Agreement to the date when System Operator provided the completed Interconnection Facilities Study to the Interconnection Customer,

(E) Percentage of delayed Interconnection Facilities Studies this reporting quarter, calculated as the sum of 3.5.2.3(B) plus 3.5.2.3(C) divided by the sum of 3.5.2.3(A) plus 3.5.2.3(C).

### **3.5.2.4 Interconnection Requests Withdrawn from Interconnection Queue.**

(A) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter,

(B) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter before completion of any Interconnection Studies or execution of any Interconnection Study Agreements,

(C) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter before completion of an Interconnection System Impact Study,

(D) Number of Interconnection Requests withdrawn from System Operator's interconnection queue during the reporting quarter before completion of an Interconnection Facility Study,

(E) Number of Interconnection Requests withdrawn from System Operator's interconnection queue after execution of an LGIA or Interconnection Customer requests the filing of an unexecuted LGIA,

(F) Mean time (in days), for all withdrawn Interconnection Requests, from the date when the request was determined to be valid to when System Operator received the request to withdraw from the queue.

3.5.3 System Operator is required to post on its website the measures in paragraph 3.5.2.1(A) through paragraph 3.5.2.4(F) for each calendar quarter within 30 days of the end of the calendar quarter. System Operator will keep the quarterly measures posted on its website for three calendar years with the first required report to be the first quarter of 2020. If System Operator retains this information on its website, a link to the information must be provided on System Operator's OASIS site.

3.5.4 In the event that any of the values calculated in paragraphs 3.5.2.1(E), 3.5.2.2(E) or 3.5.2.3(E) exceeds 25 percent for two consecutive calendar quarters, System Operator will have to comply with the measures below for the next four consecutive calendar quarters and must continue reporting this information until System Operator reports four consecutive calendar

quarters without the values calculated in 3.5.2.1(E), 3.5.2.2(E) or 3.5.2.3(E) exceeding 25 percent for two consecutive calendar quarters:

(i) System Operator must submit a report to the Commission describing the reason for each study or group of clustered studies pursuant to an Interconnection Request that exceeded its deadline (*i.e.*, 45, 90 or 180 days) for completion (excluding any allowance for Reasonable Efforts).

System Operator must describe the reasons for each study delay and any steps taken to remedy these specific issues and, if applicable, prevent such delays in the future. The report must be filed at the Commission within 45 days of the end of the calendar quarter.

(ii) System Operator shall aggregate the total number of employee hours and third party consultant hours expended towards Interconnection Studies for its Administered Transmission System that quarter and post on its website. If System Operator posts this information on its website, a link to the information must be provided on System Operator's OASIS site. This information is to be posted within 30 days of the end of the calendar quarter.

### **3.6 Coordination with Affected Systems.**

The System Operator will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected Parties and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this LGIP. The System Operator will include such Affected Parties in all meetings held with the Interconnection Customer as required by this LGIP. The Interconnection Customer will cooperate with the System Operator and Interconnecting Transmission Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. The Interconnection Customer shall be responsible for the costs associated with the studies or portions of studies associated with the Affected Systems. Payment and refunds associated with the costs of such studies will be coordinated between the Interconnection Customer and the Affected Party(ies) unless such costs are included in the costs of the Interconnection Study, in which case, the Affected Party(ies) shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the respective Interconnection Study each month and shall include in such invoices all employee hours and third party consultant hours, including subcontractor hours, expended toward the Interconnection Studies.

The System Operator shall seek the cooperation of all Affected Parties in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Nothing in the foregoing is intended to authorize the Interconnection Customer to receive interconnection, related facilities or other services on an Affected System, and provision of such services must be handled through separate arrangements with Affected Party(ies).

### **3.7 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to System Operator, which System Operator will transmit to Interconnecting Transmission Owner and any Affected Parties. In addition, if the Interconnection Customer fails to adhere to all requirements of this LGIP, except as provided in Section 13.5 (Disputes), the System Operator shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Except as otherwise provided elsewhere in this LGIP, upon receipt of such written notice, the Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the deficiency or to notify the System Operator of its intent to pursue Dispute Resolution, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, the System Operator may eliminate the Interconnection Customer's Interconnection Request from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to System Operator, Interconnecting Transmission Owner, and any Affected Parties all costs prudently incurred with respect to that Interconnection Request prior to System Operator's receipt of notice described above. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

The System Operator shall update the OASIS Queue Position posting. Except as otherwise provided elsewhere in this LGIP, the System Operator and the Interconnecting Transmission Owner shall arrange to refund to the Interconnection Customer any portion of the Interconnection Customer's deposit or study payments that exceeds the costs incurred, including interest calculated in accordance with section

35.19a(a)(2) of the Commission's regulations, or arrange to charge to the Interconnection Customer any amount of such costs incurred that exceed the Interconnection Customer's deposit or study payments, including interest calculated in accordance with section 35.19a(a)(2) of the Commission's regulations. In the event of such withdrawal, System Operator, subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information, shall provide, at Interconnection Customer's request, all information developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

### **3.8 Identification of Contingent Facilities.**

System Operator shall identify Contingent Facilities before the execution of the LGIA by reviewing the Interconnection Facilities and Network Upgrades associated with an Interconnection Request with a higher Queue Position or the list of transmission projects planned or proposed for the New England Transmission System to identify those upgrades that are not yet in service but upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing. Planned or proposed upgrades will be identified as Contingent Facilities for an Interconnection Request if the absence of those upgrades would cause additional Adverse System Impacts to be identified in the System Impact Study, using the same conditions as those used in the System Impact Study. The thresholds for identification of Adverse System Impact for the purpose of identifying Contingent Facilities will be as follows: (i) an increase in the flow in an element by at least two percent of the element's rating and that causes that flow to exceed that element's appropriate thermal rating by more than two percent where the appropriate thermal rating is the normal rating with all lines in service and the long time emergency or short time emergency rating after a contingency; (ii) a change of at least one percent in a voltage that causes a voltage level that is higher or lower than the appropriate high or low rating by more than one percent; (iii) an increase of at least a one percent change in the short circuit current experienced by an element and that causes a short circuit stress that is higher than an element's interrupting or withstand capability; or (iv) the introduction of a violation of stability criteria. Contingent Facilities that are identified during the evaluation of the Interconnection Request shall be documented in the Interconnection System Impact Study report or the LGIA for the Large Generating Facility. System Operator shall also provide, upon request of the Interconnection Customer, the estimated Interconnection Facility and/or Network Upgrade costs and estimated in-service

completion time for each identified Contingent Facilities when this information is readily available and not commercially sensitive.

## **SECTION 4. QUEUE POSITION.**

### **4.1 General.**

System Operator shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form in Appendix 1 to this LGIP, and Interconnection Customer provides such information in accordance with Section 3.4.3, then System Operator shall assign Interconnection Customer a Queue Position based on the date the application form was originally submitted.

Except as otherwise provided in this Section 4.1, the Queue Position of each Interconnection Request will be used to determine: (i) the order of performing the Interconnection Studies; (ii) the order in which Interconnection Requests will be eligible for inclusion in the CSIS and CFAC; (iii) the order in which Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service will be included in the CNR Group Study; and (iv) the cost responsibility for the facilities and upgrades necessary to accommodate the Interconnection Request. A higher queued Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued.

A CSIS and CFAC shall include the Interconnection Requests that were identified as eligible to participate in the CSIS and CFAC and met the associated requirements for inclusion in said studies in accordance with Section 4.2 of this LGIP. An Interconnection Request included in a cluster shall consider a higher queued Interconnection Request not included in the cluster. A lower queued Interconnection Request that is not included in the cluster shall consider all of the higher queued Interconnection Requests that are part of the cluster.

#### **4.1.1 Order of Interconnection Requests in the CNR Group Study**

Participation in a CNR Group Study shall be a prerequisite to achieve CNR Interconnection Service and CNI Interconnection Service. The CNR Group Study (to be conducted in accordance with Section

III.13.1.1.2.3 of the Tariff) shall include all Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service that have an associated New Capacity Show of Interest Form that was submitted during the New Capacity Show of Interest Submission Window for the purpose of qualification for participation in the same Forward Capacity Auction for a Capacity Commitment Period, in accordance with Section III.13.1.1.2 of the Tariff, as well as Long Lead Facilities in accordance with Section 3.2.3. Where a CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a lower Queue Position is associated with a New Capacity Show of Interest Form that was submitted for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and another CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a higher Queue Position is not associated with a New Capacity Show of Interest Form that was submitted for qualification until a subsequent Forward Capacity Auction, the CNR Interconnection Service or CNI Interconnection Service Interconnection Request with the lower Queue Position will be included in the CNR Group Study prior to the CNR Interconnection Service or the CNI Interconnection Service Interconnection Request with the higher Queue Position.

However, where an Interconnection Customer with a CNR Interconnection Service Interconnection Request submits a New Capacity Show of Interest Form for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and identifies in that New Capacity Show of Interest Form one or more Elective Transmission Upgrade Interconnection Request(s) for an Internal ETU that is not already included in the network model pursuant to Section III.12 of the Tariff for the particular Forward Capacity Auction, the CNR Interconnection Request will be included in the CNR Group Study at the lowest of the CNR Interconnection Request's or its associated Elective Transmission Upgrade Interconnection Request(s) for the Internal ETU's Queue Position. Where multiple Interconnection Customers' CNR Interconnection Service Interconnection Requests are associated with the same lower Queue Position for an Elective Transmission Upgrade Interconnection Request for an Internal ETU in the CNR Group Study, the CNR Interconnection Request's Queue Position will be used as the tie breaker to dictate the relative order in which the CNR Interconnection Service Interconnection Request will be included in the CNR Group Study.

An Interconnection Customer with a Generating Facility or that is associated with an Import Capacity Resource in the case of an Elective Transmission Upgrade that is treated as a Conditional Qualified New Resource, in accordance with Section III.13.1.1.2.3(f) of the Tariff, may be responsible for the facilities and upgrades associated with an overlapping CNR Interconnection Service or CNI Interconnection

Service Interconnection Request having a higher Queue Position if the Conditional Qualified New Resource obtains a Capacity Supply Obligation through a Forward Capacity Auction under Section III.13.2.5 of the Tariff.

An Interconnection Customer with a lower queued CNR Interconnection Service Interconnection Request for a Generating Facility or CNI Interconnection Service Interconnection Request for an Elective Transmission Upgrade that has achieved Commercial Operation and obtained CNR Interconnection Service or CNI Interconnection Service, respectively, may be responsible for additional facilities and upgrades if the related higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively. In such circumstance, Appendix A to the Interconnection Agreement for the lower queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request shall specify the facilities and upgrades for which the Interconnection Customer shall be responsible if the higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively.

Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates). Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting



Transmission Owners or their distribution company affiliates). Interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates that have not yet received the System Operator's approval for their Proposed Plan Applications under Section I.3.9 of the Tariff at the commencement of the CNR Group Study shall be included in the CNR Group Study after all Interconnection Requests submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and all interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff have been included in the CNR Group Study in order of submission to the Interconnecting Transmission Owners or their distribution company affiliates.

## **4.2 Clustering.**

Clustering Interconnection Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable Regional System Plan in light of the New England Transmission System's capabilities for the time period under study. The System Operator may study an Interconnection Request serially to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Large Generating Facility.

### **4.2.1 Triggers for Studying Interconnection Requests in Clusters.**

At the discretion of the System Operator, Interconnection Requests will be studied in clusters for the purpose of the Interconnection System Impact Study and the Interconnection Facilities Study when the combination of the following circumstances is present in the interconnection queue: (a) there are two (2) or more Interconnection Requests without completed Interconnection System Impact Studies in the same electrical part of the New England Control Area based on the requested Point of Interconnection, and (b) the System Operator determined that none of the Interconnection Requests identified in (a) of this Section 4.2.1 will be able to interconnect, either individually or on a cluster basis, without the use of common significant new transmission line infrastructure rated at or above 115 kV AC or HVDC.

### **4.2.2 Notice of Initiation of Cluster Studies.**

When the combination of the triggers specified in Section 4.2.1 of this LGIP are present in the interconnection queue, the System Operator will provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff. The System

Operator also will provide notice to the Interconnection Customers with Interconnection Requests identified in Section 4.2.1 of this LGIP, and at the time the System Operator notifies the Planning Advisory Committee of the initiation of a cluster, all study work for these Interconnection Requests will be suspended and they will proceed under Section 4.2 of this LGIP. The System Operator will conduct Clustering in two phases. In the first phase, the System Operator will perform a CRPS to identify the CETU and associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests considered in Section 4.2.1 of this LGIP, consistent with Section 15.2 of Attachment K. In the second phase, the System Operator will conduct a CSIS and a CFAC to study the Interconnection Requests identified through the CRPS that have elected to participate in the CSIS together with the identified CETU and associated system upgrades, in accordance with this LGIP.

Within sixty (60) Calendar Days of the System Operator's notice to the Planning Advisory Committee of the initiation of the use of Clustering for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff, Interconnection Customers with Interconnection Requests identified in Section 4.2.1 shall submit the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable), to support the conduct of the CRPS.

#### **4.2.3 Cluster Interconnection System Impact Study.**

##### **4.2.3.1 Notice of Cluster Interconnection System Impact Study Entry Deadline.**

At the same time the System Operator issues the final CRPS report to the Planning Advisory Committee in accordance with Section 15.4 of Attachment K, the System Operator will provide notice of the entry deadline for the CSIS (the "Cluster Entry Deadline") to the Interconnection Customers with Interconnection Requests identified in the final CRPS report as eligible to participate in the CSIS. The Cluster Entry Deadline shall be thirty (30) Calendar Days from the posting of the final CRPS report.

##### **4.2.3.2 Cluster Interconnection System Impact Study Entry Requirements.**

All Interconnection Requests identified in the final CRPS report, by Queue Position as assigned in accordance with Section 4.1 of this LGIP, shall be eligible to be studied together in the CSIS.

**4.2.3.2.1 Cluster Entry Deadline Election.** By the Cluster Entry Deadline, an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS must, in writing:

1. withdraw the Interconnection Request, pursuant to Section 3.7;
2. request that the System Operator re-assign the Interconnection Customer's Interconnection Request a new Queue Position at the bottom of the queue as of the Cluster Entry Deadline in relative order with any other Interconnection Requests requesting to be re-queued under this Section 4.2.3.2.1; or
3. request to be included in the CSIS and meet the CSIS entry requirements specified in Section 4.2.3.2.2.

If, by the Cluster Entry Deadline, Interconnection Customer fails to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or request to be included in the CSIS and meet the CSIS entry requirements, then the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If Interconnection Customer elects option (iii) and does not meet all of the CSIS entry requirements specified in Section 4.2.3.2.2 by the Cluster Entry Deadline, the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If an initial Cluster Participation Deposit had been submitted as part of the incomplete CSIS entry requirements submission, the initial Cluster Participation Deposit will be refunded at the time the Interconnection Request is withdrawn.

**4.2.3.2.2 CSIS Entry Requirements.** An Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS that elects option (iii) under Section 4.2.3.2.1 must meet the following CSIS entry requirements in order to be included in the CSIS:

**(1) Cluster System Impact Study Application.** By the Cluster Entry Deadline, Interconnection Customer must submit to the System Operator a completed Cluster System Impact Study Application in the form specified in Appendix 1, Attachment A-2 of this LGIP, requesting the inclusion of the Interconnection Request in the CSIS;

**(2) System Impact Study Agreement, Study Deposit, Technical Data, and Site Control.**

If an Interconnection Feasibility Study Agreement or an Interconnection System Impact Study Agreement has been executed prior to the issuance of the final CRPS report identifying the Interconnection Request as eligible for inclusion in a CSIS, such agreement shall terminate upon execution of a new Interconnection System Impact Study Agreement in accordance with this Section 4.2.3.2.2, and any unused balance of the study deposit associated with the terminated agreement shall be applied toward the study deposit associated with the new Interconnection System Impact Study Agreement.

Within fifteen (15) Business Days following the Cluster Entry Deadline, the System Operator and Interconnecting Transmission Owner will provide to Interconnection Customer an Interconnection System Impact Study Agreement, including a non-binding good faith estimate of the costs and timeframe for commencing and completing the CSIS. The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after receipt along with continued demonstration of Site Control, the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable), and a refundable study deposit, to the extent that any additional study deposit is required, in accordance with Section 7.2 of this LGIP.

**(3) Cluster Participation Deposit for the CSIS.** By the Cluster Entry Deadline, Interconnection Customer also must submit to the System Operator an initial Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CRPS report. If the System Operator subsequently identifies that an Internal ETU has met the requirements to take the place of a CETU, or portion thereof, pursuant to Section 4.2.3.4 of this LGIP, the initial Cluster Participation Deposit will be reduced to exclude the costs associated with the CETU, or portion thereof, that is being replaced by the Internal ETU, and the Interconnection Customer shall be refunded the corresponding amount. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The initial Cluster Participation Deposit will be fully refunded (with interest to be calculated in accordance with Section 3.7 of this LGIP) to Interconnection Customer with an Interconnection Request that met the cluster entry requirements: (i) if the CSIS is initially undersubscribed by more than ten (10) percent of the quantity of megawatts that the CETU developed through the CRPS was designed to enable and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, before

the CSIS starts, (ii) if the CSIS is initially oversubscribed as described in Section 4.2.3.3.2 of this LGIP (e.g., the CETU developed through the CRPS is designed to enable 1,000 MW and more than 1,000 MW meet the CSIS entry requirements by the Cluster Entry Deadline), in which case the Cluster Participation Deposits will be refunded to Interconnection Customers with Interconnection Requests corresponding to the oversubscribed megawatt quantities, (iii) if the cost estimates for the CETU and the associated system upgrades provided in the final CRPS report for the entire cluster have increased by twenty-five (25) percent or more when compared to the cost estimates provided in the draft CSIS report or the draft CFAC report and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.7, within thirty (30) Calendar Days after receipt of the draft CSIS report or the draft CFAC report in accordance with Sections 7.5 and 8.3 of this LGIP, respectively, (iv) if less than two (2) Interconnection Requests included in the CSIS or CFAC remain in the interconnection queue during the CSIS or CFAC, as applicable, in which case, the CSIS or the CFAC terminates and the remaining Interconnection Request proceeds in serial queue order, (v) at the time the Interconnection Customer with an Interconnection Request included in the CSIS provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this LGIP, (vi) if no Interconnection Customer with an Interconnection Request included in the cluster executes an Interconnection Agreement and provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this LGIP, or (vii) if all Interconnection Requests included in the cluster withdraw from the interconnection queue.

Otherwise, the initial Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue at any time after the Cluster Entry Deadline. The non-refundable initial Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **4.2.3.3 Cluster Filling, Oversubscription and Backfilling Upon Withdrawal.**

**4.2.3.3.1 Cluster Filling.** The CSIS shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area relative to the CETU identified in the final CRPS report that do not yet have a completed Interconnection System Impact Study and met the CSIS entry requirements by the Cluster Entry Deadline up to the approximate megawatt quantity identified in the final CRPS report as potentially enabled by the CETU. The Interconnection Requests will be included in

the CSIS in queue order, based on the Queue Positions assigned in accordance with Section 4.1 of this LGIP, relative to other eligible Interconnection Requests.

**4.2.3.3.2 Cluster Oversubscription.** If an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to participate in a CSIS met the CSIS entry requirements and therefore would have been eligible for inclusion in the CSIS but is excluded as a result of the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report having been exhausted in queue order under Section 4.2.3.3.1, (i) the initial Cluster Participation Deposit will be refunded to the Interconnection Customer, and (ii) the Interconnection Request will maintain its Queue Position. If there are two (2) or more such Interconnection Requests after the CSIS is filled, the System Operator will initiate another cluster to identify the transmission infrastructure to enable the interconnection of another round of Interconnection Requests consistent with Section 15.1 of Attachment K.

**4.2.3.3.3 Cluster Backfilling Upon Withdrawal.** Upon withdrawal of an Interconnection Request that is included in the CSIS, the System Operator will backfill the CSIS, in queue order, with later-queued Interconnection Requests consistent with the methodology used to fill the original CSIS as specified in Section 4.2.3.3.1 of this LGIP. The System Operator will notify all Interconnection Customers with Interconnection Requests identified by the System Operator as eligible for backfilling that the respective Large Generating Facility (or part thereof) proposed in the Interconnection Request is eligible to participate in the CSIS, and the Interconnection Customer shall have thirty (30) Calendar Days from receipt of System Operator's notice to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or accept the inclusion of the Interconnection Request (or part thereof, in which case the Interconnection Customer shall modify the Interconnection Request to reflect the appropriate reduction) in the CSIS and meet the CSIS entry requirements, consistent with Section 4.2.3.2 of this LGIP. If the Interconnection Customer does not make one of these three elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure and consider other later-queued Interconnection Requests.

**4.2.3.4 Scope of Cluster Interconnection System Impact Study.** Except as otherwise provided in this Section 4.2.3.4, the CSIS shall be conducted in accordance with Sections 7.3 and 7.4 of this LGIP. The Study Case developed for the CSIS shall also include the CETU and associated system upgrades

identified in the final CRPS report. An Internal ETU can be considered, and included in the CSIS, in place of a CETU, or portion thereof, if all of the Interconnection Customers with Interconnection Requests included in the cluster that the ISO has determined need to use the Internal ETU have indicated in the Cluster Application Form or with the executed Interconnection System Impact Study Agreement that they have a contractual commitment in place providing for the Interconnection Customers to fund and the right to use the Internal ETU. The CSIS shall evaluate the proposed interconnections to the New England Transmission System under the NC Interconnection Standard consistent with Section 3.2.2 of this LGIP and as detailed in the ISO New England Planning Procedures. Consistent with the NC Interconnection Standard, the evaluation will include conditions where the projects proposed in the Interconnection Requests that are included in the CSIS are not dispatched against each other if they do not share a system constraint that would provide the basis for a redispatch condition. The CSIS shall consist of the analysis specified in Section 7.3 of this LGIP except for analysis associated with an Interconnection Feasibility Study or a preliminary, non-binding, analysis. An Interconnection Customer with an Interconnection Request being studied as part of the CSIS cannot elect to have the Interconnection Feasibility Study or a preliminary, non-binding, analysis performed as part of the CSIS.

**4.2.3.5. Restudy of Cluster Interconnection System Impact Study.** In addition to the circumstances specified in Section 7.6 of this LGIP, a re-study of the CSIS is required due to the withdrawal of an Interconnection Request that had been included in the CSIS. Upon withdrawal of an Interconnection Request that had been included in the CSIS, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study will be conducted to determine if there are any changes in the upgrades identified during the CSIS with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

#### **4.2.4. Cluster Interconnection Facilities Study.**

Notwithstanding any other provision in this LGIP, an Interconnection Customer with an Interconnection Request included in a completed CSIS will not be eligible to waive the, or request a separate, CFAC. All Interconnection Customers with an Interconnection Request included in a completed CSIS shall be studied together in the CFAC for the purpose of implementing the conclusions of the CSIS with respect to non-sole use facilities.

**4.2.4.1 Cluster Interconnection Facilities Study Entry Requirements.** An Interconnection Customer with an Interconnection Request that was included in a completed CSIS shall execute an Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator, together with the required technical data and refundable deposit for the Interconnection Facilities Study as specified in Section 8.1 of this LGIP.

**4.2.4.2. Scope of Interconnection Facilities Study.** The CFAC will be conducted in accordance with Sections 8.2 and 8.3 of this LGIP based on a +/- 20 percent good faith cost estimate.

**4.2.4.3 Re-study of the Interconnection Facilities Study.** In addition to the circumstances specified in Section 8.5 of this LGIP, a re-study of the CFAC is required due to the withdrawal of an Interconnection Request that had been included in the CFAC. Upon withdrawal of an Interconnection Request included in the CFAC, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study of the CSIS and CFAC will be conducted to determine if there are any changes in the upgrades identified during the CSIS and CFAC with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

**4.2.4.4 Additional Cluster Participation Deposit.** Within thirty (30) Calendar Days after receipt of the final CFAC report in accordance with Section 8.3 of this LGIP, an Interconnection Customer with an Interconnection Request included in the CFAC shall submit to the System Operator an additional Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CFAC report. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The additional Cluster Participation Deposit provided under this Section 4.2.4 will be fully refunded (with interest to be calculated in accordance with Section 3.7 of this LGIP) to Interconnection Customer that submitted the additional Cluster Participation Deposit if the conditions specified in Sections 4.2.3.2.2(3)(v), (vi), or (vii) above occur.

Otherwise, the additional Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the



interconnection queue. The non-refundable additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **4.3 Transferability of Queue Position.**

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the Interconnection Request and the Point of Interconnection does not change. The Interconnection Customer must notify the System Operator, in writing, of any transfers of Queue Position and must provide the System Operator with the transferee's contact information, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

#### **4.4 Modifications.**

The Interconnection Customer shall submit to System Operator and Interconnecting Transmission Owner, in writing, modifications to any information provided in the Interconnection Request, including its attachments. The Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Sections 4.4.1 or 4.4.4, or are determined not to be Material Modifications pursuant to Section 4.4.2. The System Operator will notify the Interconnecting Transmission Owner, and, when System Operator deems it appropriate in accordance with applicable codes of conduct and confidentiality requirements, it will notify any Affected Party of such modifications.

A request to: (1) increase the energy capability or capacity capability output of a Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to Section 5.2 of this LGIP shall require a new Interconnection Request for the incremental increase and such Interconnection Request will receive the lowest Queue Position available at that time for the purposes of cost allocation and study analysis; and (2) change from NR Interconnection Service to CNR Interconnection Service, at any time, shall require a new Interconnection Request for CNR Interconnection Service and such Interconnection Request will receive the lowest Queue Position available at that time for the purposes of cost allocation and study analysis. Notwithstanding the foregoing, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service has until the Forward Capacity Auction for which the associated Capacity Commitment Period

begins less than seven (7) years (or the years agreed to pursuant to Section 3.4.1 or Section 4.4.5) from the date of the original Interconnection Request for CNR Interconnection Service to clear the entire megawatt amount for which CNR Interconnection Service was requested. A new Interconnection Request for CNR Interconnection Service will be required for the Generating Facility to participate in any subsequent auctions.

During the course of the Interconnection Studies, either the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes do not constitute a Material Modification and are acceptable to the Parties, such acceptance not to be unreasonably withheld, System Operator and the Interconnecting Transmission Owner shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 6.4, Section 7.6 and Section 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

**4.4.1** Prior to the commencement of the Interconnection System Impact Study, modifications permitted under this Section shall include specifically: (a) a decrease of up to 60 percent of electrical output (MW) of the proposed Large Generating Facility, through either (1) a decrease in facility size or (2) a decrease in Interconnection Service level (consistent with the process described in Section 3.1) accomplished by applying System Operator-approved injection-limiting equipment proposed by the Interconnection Customer and subject to review in the Interconnection System Impact Study; (b) modifying the technical parameters associated with the Large Generating Facility technology or the Large Generating Facility step-up transformer impedance characteristics; and (c) modifying the interconnection configuration. Notwithstanding the foregoing, an Interconnection Customer may decrease the electrical output of a proposed Large Generating Facility after the Cluster Entry Deadline specified in Section 4.2.3.1 of this LGIP; however, the requesting Interconnection Customer remains responsible for costs corresponding to the megawatt quantity requested as of the Cluster Entry Deadline.

**4.4.2** Prior to making any modification other than those specifically permitted by Sections 4.4.1 and 4.4.4, Interconnection Customer may first request that the System Operator and Interconnecting Transmission Owner evaluate whether such modification is a Material Modification. In response to

Interconnection Customer's request, the System Operator in consultation with the Interconnecting Transmission Owner, and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall evaluate, at the Interconnection Customer's cost, the proposed modifications prior to making them and the System Operator will inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Sections 4.4.1, 6.1, 7.2 or so allowed elsewhere, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

**4.4.3** Upon receipt of Interconnection Customer's request for modification that does not constitute a Material Modification and therefore is permitted under this Section 4.4, the System Operator in consultation with the Interconnecting Transmission Owner and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall commence and perform any necessary additional studies as soon as practicable, but in no event shall the System Operator, Interconnecting Transmission Owner, or Affected Party commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.

**4.4.4** Extensions of less than three (3) cumulative years in the Commercial Operation Date, In-Service Date or Initial Synchronization Date of the Large Generating Facility to which the Interconnection Request relates are not material and should be handled through construction sequencing, provided that the extension(s) do not exceed seven (7) years from the date the Interconnection Request was received by the System Operator.

**4.4.5** Extensions of three (3) or more cumulative years in the Commercial Operation Date, In-Service Date or Initial Synchronization Date of the Large Generating Facility to which the Interconnection Request relates or any extension of a duration that results in the Initial Synchronization Date exceeding the date the Interconnection Request was received by the System Operator by seven (7) or more years is a Material Modification unless the Interconnection Customer demonstrates to the System Operator due diligence, including At-Risk Expenditures, in pursuit of permitting, licensing and construction of the Large Generating Facility to meet the Commercial Operation Date, In-Service Date or Initial

Synchronization Date provided in the Interconnection Request. Such demonstration shall be based on evidence to be provided by the Interconnection Customer of accomplishments in permitting, licensing, and construction in an effort to meet the Commercial Operation Date, In-Service Date or Initial Synchronization Date provided in this Interconnection Request. Such evidence may include filed documents, records of public hearings, governmental agency findings, documentation of actual construction progress or documentation acceptable to the System Operator showing At-Risk Expenditure made previously, including the previous four (4) months. If the evidence demonstrates that the Interconnection Customer did not undertake reasonable efforts to meet the Commercial Operation Date, In-Service Date or Initial Synchronization Date specified in the Interconnection Request, or demonstrates that reasonable efforts were not undertaken until four (4) months prior to the request for extension, the request for extension shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed Material Modification or proceed with a new Interconnection Request for such modification.

## **SECTION 5. PROCEDURES FOR TRANSITION.**

### **5.1 Queue Position for Pending Requests.**

**5.1.1** Any Interconnection Customer assigned a Queue Position prior to March 19, 2020, shall retain that Queue Position subject to Section 4.4 of the LGIP.

**5.1.1.1** If an Interconnection Study Agreement has not been executed prior to March 19, 2020, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with the version of this LGIP in effect on March 19, 2020 (or as revised thereafter).

**5.1.1.2** If an Interconnection Study Agreement has been executed prior to March 19, 2020 and is actively under study, such Interconnection Study shall be completed in accordance with the terms of such agreement. If an Interconnection Study Agreement has been executed prior to March 19, 2020, but the Interconnection Study has not commenced, such Interconnection Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the LGIP in effect on March 19, 2020. Interconnection Studies for Interconnection Requests seeking to interconnect into the Northern and Western Maine parts of the New England Control Area that do not have a completed Interconnection System Impact Study by November 1, 2017 shall be included in the Maine

Resource Integration Study, which shall be the first CRPS. The Interconnection Customers identified in the Maine Resource Integration Study as eligible to participate in the associated Cluster System Impact Study shall make one of the elections and complete the associated requirements specified in Section 4.2.3.2 of this LGIP within thirty (30) Calendar Days from the later of November 1, 2017 or the issuance of the final Maine Resource Integration Study report. If the Interconnection Customer does not make one of the elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure.

**5.1.2 Transition Period.** To the extent necessary, the System Operator, Interconnection Customers with an outstanding Interconnection Request (i.e., an Interconnection Request for which an LGIA has neither been executed nor submitted to the Commission for approval prior to March 19, 2020), Interconnecting Transmission Owner and any other Affected Parties, shall transition to proceeding under the version of the LGIP in effect as of March 19, 2020 (or as revised thereafter) within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term “outstanding Interconnection Request” herein shall mean any Interconnection Request, on March 19, 2020: (i) that has been submitted, together with the required deposit and attachments, but not yet accepted by the System Operator; (ii) where the related LGIA has not yet been submitted to the Commission for approval in executed or unexecuted form, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding Interconnection Request as of the effective date of this LGIP may request a reasonable extension of the next applicable deadline if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension, not to exceed sixty (60) Calendar Days, shall be granted by the System Operator to the extent consistent with the intent and process provided for under this LGIP.

**5.1.3 One-Time Election for CNR Interconnection Service at Queue Position Assigned Prior to February 1, 2009.**

An Interconnection Customer with an outstanding Interconnection Request will be eligible to make a one-time election to be considered for CNR Interconnection Service at the Queue Position assigned prior to February 1, 2009. The Interconnection Customer’s one-time election must be made by the end of the New Generating Capacity Show of Interest Submission Window for the fourth Forward Capacity Auction. The Interconnection Customer’s one-time election may also include a request for Long Lead

Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5.

Interconnection Customers requesting CNR Interconnection Service will be required to comply with the requirements for CNR Interconnection Service set forth in Section 3.2.1. Interconnection Customers requesting CNR Interconnection Service that have not received a completed Interconnection System Impact Study may request a preliminary, non-binding, analysis of potential upgrades that may be necessary for the fourth Forward Capacity Auction – the prompt or near-term auction – pursuant to Sections 6.3 or 7.3, whichever is applicable.

#### **5.1.4 Interconnection Requests for Distribution Facilities Submitted Prior to August 28, 2022**

Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that submitted the Interconnection Request to the System Operator prior to August 28, 2022; and (iii) that have not completed the applicable interconnection process under a state tariff, rules or procedures shall complete the System Operator’s interconnection process in Schedule 22 of Section II of the Tariff. Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that had already completed the applicable interconnection process under a state tariff, rules or procedures; and (iii) that subsequently submitted an Interconnection Request to the System Operator prior to August 28, 2022 may either complete the System Operator’s interconnection process in Schedule 22 of Section II of the Tariff or withdraw the Interconnection Request submitted to the System Operator.

## **5.2 Grandfathering.**

**5.2.1** An Interconnection Customer’s Generating Facility that is interconnected pursuant to an Interconnection Agreement executed or submitted to the Commission for approval prior to February 1, 2009, will maintain its status as a Network Resource with Network Resource Interconnection Service eligible to participate in the New England Markets, in accordance with the requirements of Market Rule 1, Section III of the Tariff, up to the megawatt amount specified in the Interconnection Agreement, subject to the Interconnection Customer satisfying all requirements set forth in the Interconnection Agreement and this LGIP. If the Generating Facility does not meet the criteria set forth in Section 5.2.3 of this LGIP, the Interconnection Customer will be eligible to make a one-time election, pursuant to Section 5.1.3, for Capacity Network Resource treatment without submitting a new Interconnection Request; however, the Interconnection Customer will be required to comply with the requirements for

CNR Interconnection Service set forth in Section 3.2.1. Upon completion of the requirements to obtain CNR Interconnection Service, the Interconnection Customer's Interconnection Agreement shall be amended to conform to the LGIA in Appendix 6 of this LGIP.

**5.2.2** An Interconnection Customer's Generating Facility governed by an Interconnection Agreement either executed or filed with the Commission in unexecuted form prior to August 1, 2008, shall maintain the Queue Position assigned as of August 1, 2008, and be eligible to participate in the New England Markets, in accordance with the requirements in Market Rule 1, Section III of the Tariff, as in effect as of August 1, 2008, so long as the Interconnection Customer complies with all of the requirements specified in the Interconnection Agreement, including achieving the milestones associated with At-Risk Expenditures, subject to Section 4.4 of this LGIP.

**5.2.3** All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a CNR and obtain CNR Interconnection Service, in accordance with this LGIP, up to the CNR Capability of the resource. The grandfathered CNR Capability for these resources shall be equal to the megawatt amount established pursuant to the following hierarchy:

- (a) First, the megawatt amount specified in an Interconnection Agreement (whether executed or filed in unexecuted form with the Commission).
- (b) Second, in the absence of an Interconnection Agreement with a specified megawatt amount, the megawatt amount specified in an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision).
- (c) Third, in the absence of an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) with a specified megawatt amount, as determined by the System Operator based on documented historic capability of the Generating Facility.

Where a resource has both an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision), the lower megawatt amount will govern until the resource completes the applicable process(es) under the Tariff for obtaining the higher megawatt amount. The absence of an Interconnection Agreement or an approval pursuant to Section I.3.9 of the Tariff (or its predecessor

provision) specifying a megawatt amount shall be confirmed by an affidavit executed by a corporate officer of the resource attesting that the resource does not have an Interconnection Agreement and/or an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) that specifies a megawatt amount.

Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) specifies a megawatt amount at an ambient temperature consistent with the definition of CNR Capability, the grandfathered CNR Capability shall be equal to that amount.

Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of CNR Capability.

Where the implementation of this Section 5.2.3 results in a CNR Capability that is different than previously had been identified, the revised CNR Capability will be applied commencing with the next Forward Capacity Auction qualification process (after the revised CNR Capability value is identified), which is initiated by the closing deadline of the Show of Interest Submission Window in accordance with Section III.13 of the Tariff. The revised CNR Capability will continue to govern until the resource completes the applicable process(es) for obtaining the higher megawatt amount.

**5.2.4** All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a NR and obtain NR Interconnection Service, in accordance with this LGIP, up to the NR Capability of the resource. The grandfathered NR Capability shall be determined pursuant to the hierarchy set forth in Section 5.2.3.

Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) of a resource for which a temperature-adjustment curve is used for the claimed capability verification, as set forth in the ISO New England Manuals, specifies a megawatt amount at an ambient temperature, the grandfathered NR Capability shall be equal to a temperature-adjusted value consistent with the definition of NR Capability.



Where the governing document (as determined by the hierarchy set forth in Section 5.2.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of NR Capability.

### **5.3 New System Operator or Interconnecting Transmission Owner.**

If the System Operator transfers operational control of the New England Transmission System to a successor System Operator during the period when an Interconnection Request is pending, the System Operator shall transfer to the successor System Operator any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this LGIP shall be paid by or refunded to the Interconnection Customer, as appropriate. The System Operator shall coordinate with the successor System Operator to complete any Interconnection Study, as appropriate, that the System Operator has begun but has not completed.

If the Interconnecting Transmission Owner transfers ownership of its transmission facilities to a successor transmission owner during the period when an Interconnection Request is pending, and System Operator in conjunction with Interconnecting Transmission Owner has tendered a draft LGIA to the Interconnection Customer but the Interconnection Customer has not either executed the LGIA or requested the filing of an unexecuted LGIA with the Commission, unless otherwise provided, the Interconnection Customer must complete negotiations with the successor transmission owner.

## **SECTION 6. INTERCONNECTION FEASIBILITY STUDY.**

### **6.1 Interconnection Feasibility Study Agreement.**

Except as otherwise provided in Section 4.2.3.4 of this LGIP, within five (5) Business Days following the System Operator's and Interconnecting Transmission Owner's receipt from the Interconnection Customer of its election to pursue the Interconnection Feasibility Study, the designation of the Point(s) of Interconnection, and the scope of Interconnection Feasibility Study to be performed pursuant to Section 3.4.4, System Operator shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement, which includes a good faith estimate of the cost for completing the Interconnection Feasibility Study. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). No later than thirty (30) Calendar Days after its

receipt of the Interconnection Feasibility Study Agreement, (a) the Interconnection Customer shall execute and deliver the agreement to System Operator and the Interconnecting Transmission Owner, (b) the Interconnection Customer shall also deliver the refundable deposit for the Interconnection Feasibility Study to the System Operator, and (c) the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) or Attachment B, depending on the scope selected pursuant to Section 3.4.4. The deposit for the study shall be 100 percent of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection Feasibility Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Interconnection Feasibility Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner on the Interconnection Feasibility Study, including the development of the study agreement and its attachment(s). Interconnecting Transmission Owner shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the Interconnection Feasibility Study each month and shall include in such invoices all employee hours and third party consultant hours, including subcontractor hours, expended toward the Interconnection Feasibility Study. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold any amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection Feasibility Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) or Attachment B, depending on the scope elected pursuant to Section 3.4.1. If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection Feasibility Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business

Days of the receipt of the executed Interconnection Feasibility Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection Feasibility Study Agreement or deposit.

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to the Parties, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to Section 6.4 as applicable. For the purpose of this Section 6.1, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Section 3.4.4, shall be the substitute.

## **6.2 Scope of Interconnection Feasibility Study.**

The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Administered Transmission System with available data and information.

The Interconnection Feasibility Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection Feasibility Study). If the Reasonable Efforts timeframe for the completion of the Interconnection Feasibility Study does not overlap with the timeframe for the overlapping interconnection impacts analysis conducted for qualification in the Forward Capacity Auction pursuant to Section III.13.1.1.2.3 of the Tariff, then an Interconnection Customer with a CNR Interconnection Request may also request that the Interconnection Feasibility Study include a preliminary, non-binding, analysis to

identify potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection Feasibility Study Agreement.

The Interconnection Feasibility Study will consist of a limited power flow, including thermal analysis and voltage analysis, and short circuit analysis. The Interconnection Feasibility Study report will provide (i) the study findings; and (ii) a preliminary description of a non-binding good faith order of magnitude estimated cost of (unless the Interconnection Customer waives such cost estimate) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating Facility as identified within the scope of the analysis performed as part of the study.

Alternatively, the Interconnection Customer may provide the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable) with the executed Interconnection Feasibility Study Agreement and request that the Interconnection Feasibility Study consist of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, or electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Large Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting. In this case, the Interconnection Feasibility Study report will provide (i) the study findings; and, (ii) a preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless the Interconnection Customer waives such cost) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating Facility as identified within the scope of the analysis performed as part of the study.

To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 6.2, the Interconnection Feasibility Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

### **6.3 Interconnection Feasibility Study Procedures.**

The System Operator in coordination with Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection Feasibility Study no

later than ninety (90) Calendar Days after System Operator and Interconnecting Transmission Owner receive the fully executed Interconnection Feasibility Study Agreement, study deposit and required technical data in accordance with Section 6.1. At the request of the Interconnection Customer or at any time the System Operator or the Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the System Operator is unable to complete the Interconnection Feasibility Study within that time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator with input from the Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow and short circuit databases that have been developed for the Interconnection Feasibility Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

System Operator shall study the Interconnection Request at the level of Interconnection Service requested by the Interconnection Customer for purposes of determining necessary Interconnection Facilities and Network Upgrades, and at the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the facility's output and the safety or reliability of the system.

#### **6.3.1 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection Feasibility Study report to the Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Feasibility Study.

#### **6.4 Re-Study.**

If re-study of the Interconnection Feasibility Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-designation of the Point of Interconnection pursuant to Section 6.1, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take not longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Feasibility Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Feasibility Study Agreement.

The Interconnection Customer shall have the option to waive the re-study and elect to have the re-study performed as part of its Interconnection System Impact Study. The Interconnection Customer shall provide written notice of the waiver and election of moving directly to the Interconnection System Impact Study within five (5) Business Days of receiving notice from the System Operator of the required re-study.

## **SECTION 7. INTERCONNECTION SYSTEM IMPACT STUDY.**

### **7.1 Interconnection System Impact Study Agreement.**

Within five (5) Business Days following the Interconnection Feasibility Study results meeting, or subsequent to the Scoping Meeting within five (5) Business Days if the Interconnection Customer did not pursue the Interconnection Feasibility Study, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer the Interconnection System Impact Study Agreement, which includes a non-binding good faith estimate of the cost and timeframe for commencing and completing the Interconnection System Impact Study. The Interconnection System Impact Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the LGIA.

## **7.2 Execution of Interconnection System Impact Study Agreement.**

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after its receipt along with a demonstration of Site Control and the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable), and the Interconnection Customer shall also deliver a refundable deposit. An Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Large Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. The deposit for the study shall be: (i) the greater of 100 percent of the estimated cost of the study or \$250,000; or (ii) the lower of 100 percent of the estimated costs of the study or \$50,000, if the Interconnection Customer can provide: (1) evidence of applications for all Major Permits, as defined in Section III.13.1.1.2.2.2(a) of the Tariff, required in support of the Interconnection Request or written certification that Major Permits are not required, or (2) evidence acceptable to the System Operator of At-Risk Expenditures (excluding Interconnection Study costs) totaling at least the amounts of money described in (i) above; or (iii) the lower of 100 percent of the estimated costs of the study or \$50,000, if the Interconnection Request is for a modification to an existing Large Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.

The deposit shall be applied toward the cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the LGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection System Impact Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of Interconnection System Impact Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the System Impact Study, including the study agreement and its

attachment(s) and the LGIA. Interconnecting Transmission Owner shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the Interconnection System Impact Study each month and shall include in such invoices all employee hours and third party consultant hours, including subcontractor hours, expended toward the Interconnection System Impact Study. In the case of Clustering, CSIS costs that are associated with an individual Interconnection Request assessed within the CSIS will be charged directly to that Interconnection Customer. CSIS costs that are associated with the CSIS as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. If the Interconnection Customer elects the deposit described in (ii) above, the System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection System Impact Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A (and Attachment A-1, if applicable); provided that if a PSCAD model for a non-wind or non-inverter-based Large Generating Facility was determined to be needed at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model.

If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.

If the Interconnection System Impact Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting or the Interconnection Feasibility Study, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or



any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to each Party, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to Section 7.6 as applicable. For the purpose of this Section 7.2, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement if Interconnection Customer pursued the Interconnection Feasibility Study, as specified pursuant to Section 3.4.4, shall be the substitute.

### **7.3 Scope of Interconnection System Impact Study.**

The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability and operation of the New England Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection System Impact Study). An Interconnection Customer with a CNR Interconnection Request may also request that the Interconnection System Impact Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer’s Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection System Impact Study Agreement.

The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, such as electromagnetic transient analysis, including thermal analysis and voltage analysis, a system protection analysis and any other analyses that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner. The Interconnection System Impact Study report will state the assumptions upon which it is based, state the results of the analyses,

and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. For purposes of determining necessary Interconnection Facilities and Network Upgrades, the Interconnection System Impact Study shall consider the level of Interconnection Service requested by the Interconnection Customer. However, the Interconnection System Impact Study shall consider the full Generating Facility capability to ensure the acceptability of the proposed control technology to restrict the facility's output and the safety and reliability of the system. The Interconnection System Impact Study report will provide (i) a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct; (iii) a protection assessment to determine the required protection upgrades; and may provide (iv) an evaluation of the siting of the Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environment work. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.3, the Interconnection System Impact Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

#### **7.4 Interconnection System Impact Study Procedures.**

The System Operator shall coordinate the Interconnection System Impact Study with the Interconnecting Transmission Owner, and with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, that is affected by the Interconnection Request pursuant to Section 3.6 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection System Impact Study within two hundred and seventy (270) Calendar Days after the receipt of the Interconnection System Impact Study Agreement, study deposit, demonstration of Site Control, if Site Control is required, and required technical data in accordance with Section 7.2. If System Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within the times specified in this Section 7.4.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the System Operator and Interconnecting Transmission Owner are unable to complete the Interconnection System Impact Study within the time period, the System Operator shall notify the Interconnection Customer and provide an estimated start date if the study has not commenced and completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow, short circuit and stability databases that have been developed for the Interconnection System Impact Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

Except in the case of a CSIS, the System Operator shall notify the Interconnection Customer when the Interconnection System Impact Study is expected to commence within sixty-five (65) Calendar Days. An Interconnection Customer with an Interconnection Request being studied serially will be permitted to update the technical data provided in Appendix 1 and Attachment A (and Attachment A-1, if applicable), and submit modifications to that technical data to the System Operator no later than sixty (60) Calendar Days from the date that the System Operator notified the Interconnection Customer that the Interconnection System Impact Study is expected to commence. Such modifications will not be deemed Material Modifications provided they meet the requirements of Section 4.4.1 of this LGIP.

Where sufficient time has elapsed since the initial Scoping Meeting, within ten (10) Business Days after notifying the Interconnection Customer that the Interconnection System Impact Study is expected to commence, the System Operator may convene a second Scoping Meeting for the purpose of providing updated information to the Interconnection Customer in preparation for the submittal of updates to the technical data.

## **7.5 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, the System Operator shall convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, to discuss the results of the Interconnection System Impact Study.

Within ten (10) Business Days following the study results meeting, the Interconnection Customer shall provide to the System Operator written notice that it will either pursue the Interconnection Facilities Study or waive the Interconnection Facilities Study and elect an expedited interconnection. Once the Interconnection Customer notifies the System Operator of its election, such election is not subject to change. If the Interconnection Customer elects to pursue the Facilities Study it must proceed with the study. If the Interconnection Customer waives the Facilities Study, it shall commit to the following milestones in the LGIA: (i) Siting approval for the Generating Facility and Interconnection Facilities; (ii) Engineering of Interconnection Facilities approved by Interconnecting Transmission Owner; (iii) Ordering of long lead time material for Interconnection Facilities and system upgrades; (iv) Initial Synchronization Date; and (v) Commercial Operation Date.

Within thirty (30) Calendar Days of the Interconnection Customer receiving the Interconnection System Impact Study report, the Interconnection Customer shall provide written comments on the report or written notice that it has no comments on the report. The System Operator shall issue a final Interconnection System Impact Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving the Interconnection Customer's notice that it will not provide comments.

## **7.6 Re-Study.**

If re-study of the Interconnection System Impact Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) re-designation of the Point of Interconnection pursuant to Section 7.2, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing.

Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection System Impact Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection System Impact Study Agreement.

### **7.7 Operational Readiness.**

The System Operator shall, as close to the Interconnection Customer's actual Synchronization Date as reasonably possible, ensure that operational analysis, including current stability analyses, power flow analyses, and any other analyses deemed necessary by the System Operator, are performed, and that procedures are developed or updated to address the operation of the New England Transmission System with the addition of the Interconnection Customer's Generating Facility. The operational analysis will also include tests of system performance with selected facilities out of service. Such studies shall be performed at the expense of the Interconnection Customer.

The System Operator is not obligated to perform the operational analyses described in this Section 7.7 if, in the exercise of reasonable discretion, the System Operator in consultation with Interconnecting Transmission Owner determines that interconnection of the Interconnection Customer's Generating Facility to the Administered Transmission System is remote and speculative.

## **SECTION 8. INTERCONNECTION FACILITIES STUDY.**

### **8.1 Interconnection Facilities Study Agreement.**

Except as otherwise provided in Section 4.2.4 of this LGIP, the Interconnection Customer may waive the Interconnection Facilities Study and instead elect expedited interconnection, which means that the Interconnection Customer may enter into E&P Agreements under Section 9 if it had not already done so, and shall enter into an LGIA in accordance with the requirements specified in Section 11.

If the Interconnection Customer waives the Interconnection Facilities Study, the Interconnection Customer, subject to the specific terms of the E&P Agreements, assumes all risks and shall pay all costs associated with equipment, engineering, procurement and construction work covered by the Interconnection Facilities Study as described in Section 8.2 below.

The System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this LGIP simultaneously with the delivery of the Interconnection System Impact Study to the Interconnection Customer.

The Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection Facilities Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the LGIA. Within three (3) Business Days following the Interconnection System Impact Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer a non-binding good faith estimate of the cost for completing the Interconnection Facilities Study in accordance with requirements specified in Section 8.3. The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator within thirty (30) Calendar Days after its receipt, together with the required technical data and the refundable deposit for the Interconnection Facilities Study. In accordance with Section 8.3, the Interconnection Customer shall specify in Attachment A to the Interconnection Facilities Study Agreement whether it wants no more than a +/- 20 percent or a +/- 10 percent good faith cost estimate contained in the report. The deposit for the study shall be either: (i) the greater of twenty-five percent of the estimated cost of the study or \$250,000; or (ii) the greater of 100 percent of one month's estimated study cost or \$100,000, if the Interconnection Customer can provide: (1) evidence of applications for all Major Permits, as defined in Section III.13.1.1.2.2.2 of the Tariff, required in support of the Interconnection Request, or provide certification that Major Permits are not required or (2) evidence acceptable to the System Operator of At-Risk Expenditures (excluding Interconnection Study costs) totaling at least the amounts of money in (i) above, not including the same At-Risk Expenditures demonstrated with the Interconnection System Impact Study Agreement, if applicable; or (iii) the greater of 100 percent of one month's estimated study cost or \$100,000, if the Interconnection Request is for a modification to an existing Large Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.

Any difference between the study deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall

issue to the Interconnection Customer an invoice for the cost of the Interconnection Facilities Studies that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Interconnection Facilities Study, the study agreement and its attachment(s) and the LGIA.

Interconnecting Transmission Owner shall provide System Operator on a monthly basis, and in the form and format specified by the System Operator, invoices for the work conducted on the Interconnection Facilities Study each month and shall include in such invoices all employee hours and third party consultant hours, including subcontractor hours, expended toward the Interconnection Facilities Study. In the case of Clustering, CFAC costs that are associated with an individual Interconnection Request assessed within the CFAC will be charged directly to that Interconnection Customer. CFAC costs that are associated with the CFAC as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

## **8.2 Scope of Interconnection Facilities Study.**

The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Administered Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The Interconnection Facilities Study shall also identify any potential control technology for the Large Generating Facility if the Interconnection Customer has requested Interconnection Service at a level that is lower than the nameplate capability of the facility. The scope and cost of the Interconnection Facilities Study shall include completion of any engineering work limited to what is reasonably required to (i) estimate such aforementioned cost to the accuracy

specified by the Interconnection Customer pursuant to Section 8.3, (ii) identify, configurations of required facilities and (iii) identify time requirements for construction and installation of required facilities.

### **8.3 Interconnection Facilities Study Procedures.**

The System Operator shall coordinate the Interconnection Facilities Study with Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, pursuant to Section 3.6 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the study and the System Operator shall issue a draft Interconnection Facilities Study report to the Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: ninety (90) Calendar Days, with no more than a +/- 20 percent good faith cost estimate contained in the report; or one hundred eighty (180) Calendar Days, if the Interconnection Customer requests a +/- 10 percent good faith cost estimate. Such cost estimates either individually or in the aggregate will be provided in the final study report. If the System Operator uses Clustering, the System Operator and the Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection Facilities Study within the times specified in this Section 8.3.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Facilities Study, System Operator shall notify the Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, as to the schedule status of the Interconnection Facilities Study. If the System Operator is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, the System Operator shall notify the Interconnection Customer, Interconnecting Transmission Owner and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and provide an estimated completion date and an explanation of the reasons why additional time is required.



The Interconnection Customer and appropriate Affected Parties may, within thirty (30) Calendar Days after receipt of the draft report, provide written comments to the System Operator and Interconnecting Transmission Owner, which the System Operator shall include in the final report. The System Operator shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The System Operator may reasonably extend such fifteen-day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the System Operator or Interconnecting Transmission Owner to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, or any third party consultant retained by the Interconnection Customer supporting documentation, with workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

#### **8.4 Meeting with Parties.**

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Facilities Study.

#### **8.5 Re-Study.**

If re-study of the Interconnection Facilities Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a

modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Facilities Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Facilities Study Agreement.

## **SECTION 9. ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT.**

Prior to executing an LGIA, an Interconnection Customer may request, in order to advance the implementation of its interconnection, and the Interconnecting Transmission Owner and any Affected Party shall offer the Interconnection Customer, an E&P Agreement that authorizes the Interconnecting Transmission Owner and any Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the Interconnecting Transmission Owner or any Affected Party shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the LGIP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer’s Queue Position or Initial Synchronization Date. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer, including a deposit of 100 percent of the estimated engineering and study costs, and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or an E&P Agreement is terminated by any Party, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the Interconnecting Transmission Owner or the Affected Party that is a party to an E&P Agreement may elect: (i) to take title to the equipment, in which event the Interconnecting Transmission Owner or relevant Affected Party shall refund the Interconnection

Customer any amounts paid by the Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **SECTION 10. OPTIONAL INTERCONNECTION STUDY.**

### **10.1 Optional Interconnection Study Agreement.**

On or after the date when the Interconnection Customer receives Interconnection System Impact Study report and no later than five (5) Business Days after the study results meeting to review the report, the Interconnection Customer may request in writing, and the System Operator in coordination with the Interconnecting Transmission Owner shall perform, an Optional Interconnection Study. The request shall describe the assumptions that the Interconnection Customer wishes the System Operator to study within the scope described in Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, the System Operator shall provide to the Interconnecting Transmission Owner and the Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify the Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case, and (iii) specify the System Operator's and Interconnecting Transmission Owner's estimate of the cost of the Optional Interconnection Study. To the extent known by the System Operator, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. The Optional Interconnection Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Optional Interconnection Study, including the cost of developing the study agreement and its attachment(s). Notwithstanding the above, the System Operator and Interconnecting Transmission Owner shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the required technical data and the refundable deposit for the Optional Interconnection Study to the System Operator. The deposit for the study shall be 100 percent of the estimated cost of the study. Any difference between the study deposit and the actual cost of the Optional Interconnection Study shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Optional Interconnection Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Optional Interconnection Study and the study agreement and its attachments(s). The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

#### **10.2 Scope of Optional Interconnection Study.**

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The System Operator shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

The Optional Interconnection Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis, and any other analyses that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner.

#### **10.3 Optional Interconnection Study Procedures.**

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to the System Operator and Interconnecting Transmission Owner within ten (10) Business Days of the Interconnection Customer receipt of the Optional Interconnection Study Agreement. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed-upon time period specified within the Optional Interconnection Study Agreement. If the System Operator and Interconnecting Transmission Owner are unable to complete the Optional Interconnection Study within such time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

#### **10.4 Meeting with Parties.**

Within ten (10) Business Days of providing an Optional Interconnection Study report to Interconnection Customer, System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Optional Interconnection Study.

#### **10.5 Interconnection Agreement Developed Based on Optional Interconnection Study.**

If the LGIA for a Large Generating Facility is based on the results of an Optional Interconnection Study, the LGIA shall reflect the conditions studied and any obligations that may involve: (i) additional studies if such conditions change, (ii) operational limits, or (iii) financial support for transmission upgrades.

### **SECTION 11. STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT (LGIA).**

### **11.1 Tender.**

Interconnection Customer shall tender comments or provide notice, in writing, to the System Operator and Interconnecting Transmission Owner that the Interconnection Customer has no comments on the draft Interconnection Facilities Study report or on the draft Interconnection System Impact Study report if the Interconnection Customer waived the Interconnection Facilities Study, within thirty (30) Calendar Days of receipt of the report. Except as provided in the E&P Agreement or any mutual agreement by the entities that would be Parties to the LGIA, the System Operator shall initiate the development of the LGIA process within fifteen (15) Calendar Days after the comments are submitted or waived, by tendering to the Interconnection Customer a draft LGIA, together with draft appendices completed by the System Operator, in conjunction with the Interconnecting Transmission Owner to the extent practicable. The draft LGIA shall be in the form of the System Operator's Commission-approved standard form LGIA which is in Appendix 6 to Schedule 22. The Interconnection Customer shall return the Interconnection Customer specific information required to complete the form of LGIA, including the appendices, in Appendix 6 of Schedule 22 that the Interconnection Customer is willing to execute within thirty (30) Calendar Days after receipt of the draft from the System Operator.

### **11.2 Negotiation.**

Notwithstanding Section 11.1, at the request of the Interconnection Customer, the System Operator and Interconnecting Transmission Owner shall begin negotiations with the Interconnection Customer concerning the appendices to the LGIA at any time after the Interconnection Facilities Study is complete or after the Interconnection System Impact Study is complete if the Interconnection Customer intends to waive the Interconnection Facilities Study. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner shall negotiate concerning any disputed provisions of the appendices to the draft LGIA for not more than sixty (60) Calendar Days after tender by the System Operator of the draft LGIA pursuant to Section 11. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft LGIA pursuant to Section 11.1 and request submission of the unexecuted LGIA with the Commission or initiate Dispute Resolution procedures pursuant to Section 13.5. If the Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to request either the filing of the unexecuted LGIA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed the LGIA, requested filing of an unexecuted LGIA, or initiated Dispute

Resolution procedures pursuant to Section 13.5 within sixty (60) Calendar Days of tender of by the System Operator of the draft LGIA pursuant to Section 11.1, it shall be deemed to have withdrawn its Interconnection Request. The System Operator and Interconnecting Transmission Owner shall provide to the Interconnection Customer a final LGIA within fifteen (15) Business Days after the mutually agreed completion of the negotiation process.

### **11.3 Evidence to be Provided by Interconnection Customer; Execution and Filing of LGIA.**

#### **11.3.1 Evidence to be Provided by Interconnection Customer.**

**11.3.1.1 Site Control.** Within fifteen (15) Business Days after receipt of the final LGIA, the Interconnection Customer shall provide (A) to the System Operator, reasonable evidence of continued Site Control, or (B) to the Interconnecting Transmission Owner, posting of \$250,000, non-refundable additional security, which shall be applied toward future construction costs. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Large Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property.

**11.3.1.2 Development Milestones.** Within fifteen (15) Business Days after receipt of the final LGIA, the Interconnection Customer also shall provide to the System Operator reasonable evidence that one or more of the following milestones in the development of the Large Generating Facility, to be elected by the Interconnection Customer, has been achieved: (i) the execution of a contract for the supply or transportation of fuel to the Large Generating Facility; (ii) the execution of a contract for the supply of cooling water to the Large Generating Facility; (iii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Large Generating Facility; (iv) execution of a contract for the sale of electric energy or capacity from the Large Generating Facility; (v) application for an air, water, or land use permit.

At the same time, the Interconnection Customer with an Interconnection Request that was not studied using Clustering shall commit to a schedule for the payment of upgrades identified in the Interconnection Studies or an E&P Agreement, and either: (A) provide evidence of approvals for all Major Permits, as defined in Section III.13.1.1.2.2.2(a) of the Tariff, or (B) provide to the Interconnecting Transmission

Owner, in the form acceptable to the Interconnecting Transmission Owner, a refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades identified in the Interconnection Studies or an E&P Agreement, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final LGIA. If the Interconnection Customer selects option (B) above, it shall also commit in the LGIA to the achievement of: (i) milestones for the completion of Major Permit approvals, and (ii) in the case of a CNR Interconnection Request, milestones to align the LGIA with the fulfillment of terms outlined in Section III.13 of the Tariff for participation in the Forward Capacity Market.

Within fifteen (15) Business Days after receipt of the final LGIA, an Interconnection Customer with an Interconnection Request studied using Clustering that provided the additional Cluster Participation Deposit in accordance with Section 4.2.4.4 shall provide to the Interconnecting Transmission Owner, in cash, a potentially non-refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades, including any CETUs, identified in the CFAC, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final LGIA. If the Interconnection Customer does not submit this deposit (or make the initial payment) by the fifteenth Business Day after receipt of the final LGIA, the Interconnection Request shall be automatically withdrawn from the interconnection queue without further opportunity to cure, and the Interconnection Customer's initial and additional Cluster Participation Deposits shall become non-refundable. The non-refundable initial and additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in the cluster at time the facilities proposed in the Interconnection Requests achieve Commercial Operation. If an Interconnection Request is withdrawn after the Interconnection Customer's payment of twenty (20) percent of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner, then the payment shall be used to offset the costs of the CETU. Any unspent payments of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner will be refunded to the respective Interconnection Customers that executed the Interconnection Agreement and provided to the Interconnecting Transmission Owner the twenty (20) percent deposit (or initial payment)



if all the associated Interconnection Requests are withdrawn from the interconnection queue and the associated Interconnection Agreements are terminated.

**11.3.2 Execution and Filing of LGIA.** Within fifteen (15) Business Days after receipt of the final LGIA, (i) the Interconnection Customer and Interconnecting Transmission Owner shall execute three (3) originals of the tendered LGIA and return them to the System Operator, who will send an original to Interconnecting Transmission Owner and Interconnection Customer; or (ii) the Interconnection Customer shall request in writing that the System Operator and the Interconnecting Transmission Owner jointly file with the Commission an LGIA in unexecuted form. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered LGIA (if it does not conform with a Commission-approved standard form of interconnection agreement) or the request to file an unexecuted LGIA, the System Operator and Interconnecting Transmission Owner, in accordance with Section 11.3.3 or Section 11.3.4, as appropriate, shall jointly file the LGIA with the Commission, together with its explanation of any matters as to which the System Operator, Interconnection Customer or Interconnecting Transmission Owner disagree and support for the costs that the Interconnecting Transmission Owner proposes to charge to the Interconnection Customer under the LGIA. An unexecuted LGIA should contain terms and conditions deemed appropriate by the System Operator and Interconnecting Transmission Owner for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted LGIA, they may proceed pending Commission action.

With respect to the interconnection of an Interconnection Customer under Schedule 22, the LGIA shall be a three-party agreement among the Interconnecting Transmission Owner, the System Operator and the Interconnection Customer. If Interconnecting Transmission Owner, System Operator and Interconnection Customer agree to the terms and conditions of a specific LGIA, or any amendments to such an LGIA, then the System Operator and Interconnecting Transmission Owner shall jointly file the executed LGIA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act. To the extent the Interconnecting Transmission Owner, System Operator and Interconnection Customer cannot agree to proposed variations from the standard form of LGIA in Appendix 6 or cannot otherwise agree to the terms and conditions of the LGIA for such Large Generating Unit, or any amendments to such an LGIA, then the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted LGIA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act and shall identify the areas of disagreement in such filing, provided that, in the event of disagreement on terms and

conditions of the LGIA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of the Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on such terms and conditions.

**11.3.3** The Interconnecting Transmission Owner, acting on its own or jointly with the System Operator, may initiate a filing to amend this LGIP and the standard form of LGIA in Appendix 6 under Section 205 of the Federal Power Act and shall include in such filing the views of System Operator, provided that the standard applicable under Section 205 of the Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on any financial obligations of the Interconnecting Transmission Owner or the Interconnection Customer(s), and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets.

#### **11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final LGIA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall perform their respective obligations in accordance with the terms of the LGIA, subject to modification by the Commission. Upon submission of an unexecuted LGIA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall promptly comply with the unexecuted LGIA, subject to modification by the Commission.

### **SECTION 12. CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES.**

#### **12.1 Schedule.**

The Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party shall negotiate in good faith concerning a schedule for the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades.

#### **12.2 Construction Sequencing.**

**12.2.1 General.** In general, the Initial Synchronization Date of an Interconnection Customer seeking interconnection to the Administered Transmission System will determine the sequence of construction of Network Upgrades.

**12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than the Interconnection Customer.** An Interconnection Customer with an executed or unexecuted, but filed with the Commission, LGIA, in order to maintain its Initial Synchronization Date, may request that the Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such Initial Synchronization Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than the Interconnection Customer that is seeking interconnection to the Administered Transmission System, in time to support such Initial Synchronization Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party; (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

The Interconnecting Transmission Owner or appropriate Affected Party will refund to the Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the LGIA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that the Interconnecting Transmission Owner or appropriate Affected Party has not refunded to the Interconnection Customer. Payment by that entity with a contractual obligation to construct such Network Upgrades shall be due on the date that it would have been due had there been no request for advance construction. The Interconnecting Transmission Owner or appropriate Affected Party shall forward to the Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades as payment in full for the outstanding balance owed to the Interconnection Customer. The Interconnecting Transmission Owner or appropriate Affected Party then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the LGIA.

**12.2.3 Advancing Construction of Network Upgrades that are Part of the Regional System Plan of the System Operator.** An Interconnection Customer with an LGIA, in order to maintain its Initial

Synchronization Date, may request that Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such Initial Synchronization Date and (ii) would otherwise not be completed, pursuant to the Regional System Plan, in time to support such Initial Synchronization Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party any associated expediting costs.

**12.2.4 Amended Interconnection System Impact Study.** An Interconnection System Impact Study will be amended to determine the facilities necessary to support the requested Initial Synchronization Date. This amended study will include those transmission and Large Generating Facilities that are expected to be in service on or before the requested Initial Synchronization Date. The LGIA will also be amended to reflect the results of the Amended Interconnection System Impact Study and any changes in obligations, including financial support, of the Parties.

## **SECTION 13. MISCELLANEOUS.**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information treated as confidential under the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the others prior to the execution of an LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by any Party, the other Party(ies) shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may

disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**13.1.1 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the LGIA; or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**13.1.2 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

**13.1.3 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**13.1.4 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**13.1.5 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under these procedures or its regulatory requirements.

**13.1.6 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of the LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**13.1.7 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.

**13.1.8 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 CFR section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the LGIP, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR. section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party(ies) to the LGIA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules, regulations and Section 13.1.

**13.1.9** Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Party’s(ies’) Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

**13.1.11** The System Operator and Interconnecting Transmission Owner shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time when Confidential Information is no longer needed.

### **13.2 Delegation of Responsibility.**

The System Operator and Interconnecting Transmission Owner, or any Affected Party may use the services of subcontractors as it deems appropriate to perform its obligations under this LGIP. The Party using the services of a subcontractor shall remain primarily liable to the Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this LGIP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

### **13.3 Obligation for Study Costs.**

The System Operator and the Interconnecting Transmission Owner shall charge, and the Interconnection Customer shall pay, the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to the Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. The Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefore. The System Operator and Interconnecting Transmission Owner shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed amounts in compliance herewith.

### **13.4 Third Parties Conducting Studies.**

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) the Interconnection Customer receives notice pursuant to Sections 6.3, 7.4 or 8.3 that the System Operator or Interconnecting Transmission Owner will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or



(iii) the Interconnection Customer receives neither the Interconnection Study nor a notice under Sections 6.3, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then the Interconnection Customer may request, which request will not be unreasonably denied, that the System Operator and Interconnecting Transmission Owner utilize a third party consultant reasonably acceptable to the System Operator, Interconnection Customer, Interconnecting Transmission Owner and any appropriate Affected Party, to perform such Interconnection Study under the direction of the System Operator or Interconnecting Transmission Owner as applicable. At other times, System Operator or Interconnecting Transmission Owner may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of the Interconnection Customer, or on its own volition.

In all cases, use of a third party consultant shall be in accord with Article 26 of the LGIA (Subcontractors) and limited to situations where the System Operator or Interconnecting Transmission Owner determines that doing so will help maintain or accelerate the study process for the Interconnection Customer's pending Interconnection Request and not interfere with the System Operator and Interconnecting Transmission Owner's progress on Interconnection Studies for other pending Interconnection Requests.

In cases where the Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, the Interconnection Customer, System Operator and Interconnecting Transmission Owner shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. The System Operator and Interconnecting Transmission Owner shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as practicable upon the Interconnection Customer's request subject to the confidentiality provision in Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. In any case, such third party contract may be entered into with the System Operator, Interconnection Customer, or Interconnecting Transmission Owner at the System Operator and Interconnecting Transmission Owner's discretion. In the case of (iii) the Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this LGIP, Article 26 of the LGIA (Subcontractors), and the relevant Tariff procedures and protocols as would apply if the System Operator and Interconnecting Transmission Owner were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes.

The System Operator and Interconnecting Transmission Owner shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

### **13.5 Disputes.**

**13.5.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with the LGIA, the LGIP, or their performance, such Party (the “Disputing Party”) shall provide the other Party(ies) with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party’s(ies’) receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, after thirty (30) Calendar Days, then (i) in the case of disputes arising out of or in conjunction with the LGIA, the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted LGIA, or amendment thereto, with the Commission in accordance with Section 11.3.4, or (ii) in the case of disputes arising out of or in connection with any other matter regarding the administration of the LGIP, the System Operator may terminate the Interconnection Request and the Interconnection Customer may seek relief pursuant to Section 206 of the Federal Power Act. Each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this Schedule 22.

**13.5.2 External Arbitration Procedures.** Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial

Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Section 13, the terms of this Section 13 shall prevail.

**13.5.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons for such decision. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the LGIA and LGIP and shall have no power to modify or change any provision of the LGIA and LGIP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**13.5.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three-member panel and one-third of any associated arbitration costs; or (2) one-third the cost of the single arbitrator jointly chosen by the Parties and one-third of any associated arbitration costs.

**13.5.5 Non-binding Dispute Resolution Procedures.** If a Party has submitted a Notice of Dispute pursuant to Section 13.5.1, and the Parties are unable to resolve the claim or dispute through unassisted or assisted negotiations within the thirty (30) Calendar Days provided in that section, and the Parties cannot reach mutual agreement to pursue the Section 13.5 arbitration process, a Party may request that the other Parties engage in Non-binding Dispute Resolution pursuant to this Section 13.5.5 by providing written notice to the other Parties (“Request for Non-binding Dispute Resolution”). Conversely, either Party may file a Request for Non-binding Dispute Resolution pursuant to this Section 13.5.5 without first seeking mutual agreement to pursue the Section 13.5 arbitration process. The process in Section 13.5.5 shall serve as an alternative to, and not a replacement of, the Section 13.5 arbitration process. Pursuant to this process, System Operator must within 30 days of receipt of the Request for Non-binding Dispute Resolution appoint a neutral decision-maker that is an independent subcontractor that shall not

have any current or past substantial business or financial relationships with the Parties. Unless otherwise agreed by the Parties, the decision-maker shall render a decision within sixty (60) Calendar Days of appointment and shall notify the Parties in writing of such decision and reasons therefore. This decision-maker shall be authorized only to interpret and apply the provisions of the LGIP and LGIA and shall have no power to modify or change any provision of the LGIP and LGIA in any manner. The result reached in this process is not binding, but, unless otherwise agreed, the Parties may cite the record and decision in the non-binding dispute resolution process in future dispute resolution processes, including in a Section 13.5 arbitration, or in a Federal Power Act Section 206 complaint. Each Party shall be responsible for its own costs incurred during the process and the cost of the decision-maker shall be divided equally among each Party to the dispute.

### **13.6 Local Furnishing Bonds.**

**13.6.1 Facilities Financed by Local Furnishing Bonds.** This provision is applicable only to interconnections associated with facilities financed for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this LGIA and LGIP, the Interconnecting Transmission Owner shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this LGIA and LGIP if the provision of such Interconnection Service would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance the Interconnecting Transmission Owner's facilities that would be used in providing such Interconnection Service.

**13.6.2 Alternative Procedures for Requesting Interconnection Service.** If the Interconnecting Transmission Owner determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such Interconnection Service, it shall advise the Interconnection Customer within thirty (30) Calendar Days of receiving notice of the Interconnection Request. The Interconnection Customer thereafter may renew its Interconnection Request using the process specified in the Tariff.

## **APPENDICES TO LGIP**

APPENDIX 1 INTERCONNECTION REQUEST

APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT

APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT

APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT

APPENDIX 6 LARGE GENERATOR INTERCONNECTION AGREEMENT

**APPENDIX 1**  
**INTERCONNECTION REQUEST**

The undersigned Interconnection Customer submits this request to interconnect its Large Generating Facility to the Administered Transmission System under Schedule 22 - Large Generator Interconnection Procedures (“LGIP”) of the ISO New England Inc. Open Access Transmission Tariff (the “Tariff”). Capitalized terms have the meanings specified in the Tariff.

---

---

**PROJECT INFORMATION**

Proposed Project Name: \_\_\_\_\_

**1. This Interconnection Request is for (check one):**

- \_\_\_\_\_ A proposed new Large Generating Facility
- \_\_\_\_\_ An increase in the generating capacity or a modification that has the potential to be a Material Modification of an existing Generating Facility
- \_\_\_\_\_ Commencement of participation in the wholesale markets by an existing Generating Facility
- \_\_\_\_\_ A change from Network Resource Interconnection Service to Capacity Network Resource Interconnection Service

**2. The types of Interconnection Service requested:**

- \_\_\_\_\_ Network Resource Interconnection Service (energy capability only)
- \_\_\_\_\_ Capacity Network Resource Interconnection Service (energy capability and capacity capability)

If Capacity Network Resource Interconnection Service, does Interconnection Customer request Long Lead Facility treatment? Check: \_\_\_\_ Yes or \_\_\_\_ No

If yes, provide, together with this Interconnection Request, the Long Lead Facility deposit and other required information as specified in Section 3.2.3 of the LGIP, including (if the Large Generating Facility will be less than 100 MW) a justification for Long Lead Facility treatment.

3. This Interconnection Customer requests (check one, selection is not required as part of the initial Interconnection Request):

\_\_\_\_\_ An Interconnection Feasibility Study

\_\_\_\_\_ An Interconnection System Impact Study

(The Interconnection Customer shall select either option and may revise any earlier selection up to within five (5) Business Days following the Scoping Meeting.)

4. The Interconnection Customer shall provide the following information:

Address or Location of the Facility (including Town/City, County and State):

---

---

---

Approximate location of the proposed Point of Interconnection:

---

Type of Generating Facility to be Constructed: \_\_\_\_\_

Will the Generating Facility include electric storage capacity? Yes\_\_\_\_No\_\_\_\_

If yes, describe the electric storage device and specifications:

---

---

---

**Primary frequency response operating range for electric storage resources:**

---

**Generating Facility Fuel Type:**

---

**Generating Facility Capacity (MW):**

<b>Temperatures<sup>1</sup></b>	<b>Maximum Gross MW Electrical Output<sup>2</sup></b>	<b>Maximum Net MW Electrical Output<sup>3</sup></b>	<b>Net MW Capability at the Point of Interconnection<sup>4</sup></b>
<b>At or above 90 degrees F</b>			
<b>At or above 50 degrees F</b>			
<b>At or above 20 degrees F</b>			
<b>At or above 0 degrees F</b>			



Requested capacity (in MW) of Interconnection Service (if lower than the Generating Facility Capacity):

<b>Temperatures<sup>1</sup></b>	<b>Requested Gross MW Electrical Output<sup>2</sup></b>	<b>Requested Net MW Electrical Output<sup>3</sup></b>	<b>Requested Net MW Capability at the Point of Interconnection<sup>4</sup></b>
<b>At or above 90 degrees F</b>			
<b>At or above 50 degrees F</b>			
<b>At or above 20 degrees F</b>			
<b>At or above 0 degrees F</b>			

Notes:

<sup>1</sup> In each row, insert all values corresponding to the given temperature, or a temperature greater than the given temperature, at which aggregate maximum gross output of the Generating Facility would be the highest. For example, if the aggregate maximum gross Generating Facility output occurs at 12 degrees F, all values in the “At or above 0 degrees F” row shall correspond to the 12 degrees F operating condition.

<sup>2</sup> Measured at the terminal(s) or inverter/converter terminal(s), as applicable, for each generating unit comprising the Generating Facility.

<sup>3</sup> Measured at the terminal(s) or inverter/converter terminal(s), as applicable, for each generating unit comprising the Generating Facility less any station service at each generating unit’s terminal(s) or inverter/converter terminal(s), as applicable.

<sup>4</sup> Measured at the Interconnection Customer’s proposed Point of Interconnection. The values correspond to the requested levels of Interconnection Service pursuant to Section 3.1 of the LGIP. The values account for any station service, losses incurred in Interconnection Facilities, station or generator step up transformers, and any other auxiliary systems. After the Interconnection Request is deemed valid, any increases to these values shall be subject to a new, separate Interconnection Request.

**General description of the equipment configuration, including any proposed control technologies to restrict the Large Generating Facility’s output to the requested Interconnection Service levels, if applicable (# of units and GSUs):**

---

**Requested Commercial Operations Date:**

---

**Requested Initial Synchronization Date:**

---

**Requested In-Service Date:**

---

**Evidence of Site Control (check one):**

\_\_\_\_\_ **If for Capacity Network Resource Interconnection Service, Site Control is provided herewith, as required.**

\_\_\_\_\_ **If for Network Resource Interconnection Service: (Check one)**

\_\_\_\_\_ **Is provided herewith**

\_\_\_\_\_ **In lieu of evidence of Site Control, a \$10,000 deposit is provided (refundable within the cure period as described in Section 3.4.3 of the LGIP).**

\_\_\_\_\_ **Site Control is not provided because the proposed modification is to the Interconnection Customer's existing Large Generating Facility and, by checking this option, the Interconnection Customer certifies that it has Site Control and that the proposed modification does not require additional real property.**

**The technical data specified within the applicable attachment to this form (check one):**

\_\_\_\_\_ **Is included with the submittal of this Interconnection Request form**

\_\_\_\_\_ **Will be provided on or before the execution and return of the Feasibility Study Agreement (Attachment A (and Attachment A-1, if applicable) or Attachment B, depending on the scope of the study) or the System Impact Study Agreement (Attachment A (and Attachment A-1, if applicable)), as applicable**

**The ISO will post the Project Information on the ISO web site under "New Interconnections" and OASIS.**

---

---

**CUSTOMER INFORMATION**

**Company Name:** \_\_\_\_\_

**ISO Customer ID# (If available):** \_\_\_\_\_

**(Interconnection Customer)**

**Company Address:**    **PO Box No.:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City, State ZIP:** \_\_\_\_\_

**Company Representative:**    **Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Company Representative's Company and Address (if different from above):**

**Company Name:** \_\_\_\_\_

**PO Box No.:** \_\_\_\_\_

**Street Address:** \_\_\_\_\_

**City, State ZIP:** \_\_\_\_\_

**Phone:** \_\_\_\_\_ **FAX:** \_\_\_\_\_ **email:** \_\_\_\_\_

---

---

**This Interconnection Request is submitted by:**

**Authorized Signature:** \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***In order for an Interconnection Request to be considered a valid request, it must:***

- (a) Be accompanied by a deposit of \$50,000.00 that is provided electronically and which may be refundable in accordance with Section 3.4.1 of the LGIP;***
- (b) For Capacity Network Resource Interconnection Service, include documentation demonstrating Site Control. If for Network Resource Interconnection Service, demonstrate Site Control or post an additional deposit of \$10,000.00. If the Interconnection Customer with an Interconnection Request for Network Resource Interconnection Service demonstrates Site Control within the cure period specified in Section 3.4.1 of the LGIP, the additional deposit of \$10,000.00 shall be refundable (An Interconnection Customer does not need to demonstrate Site Control for an Interconnection Request for a modification to its existing Large Generating Facility where the Interconnection Customer has certified that it has Site Control and that the proposed modification does not require additional real property);***
- (c) Include a detailed map, such as a map of the quality produced by the U.S. Geological Survey, which clearly indicates the site of the new facility and pertinent surrounding structures; and***
- (d) Include all information required on the Interconnection Request form and attachments thereto; and***
- (e) Include the deposit and all information required for Long Lead Facility treatment, if such treatment is requested in accordance with Section 3.2.3 of the LGIP.***

***The Interconnection Request must be submitted to the System Operator via the Interconnection Request Tracking Tool or IRTT, a web-based application for submitting, tracking and viewing Interconnection Requests available on the ISO New England website.***

**The technical data required below must be submitted no later than the date of execution of the System Impact Study Agreement pursuant to Section 7.2 of the LGIP.**

**LARGE GENERATING FACILITY DATA**

**UNIT RATINGS**

Kva	°F	Voltage
Power Factor		
Speed (RPM)		Connection (e.g. Wye)
Short Circuit Ratio		Frequency, Hertz
Stator Amperes at Rated Kva		Field Volts
Max Turbine MW	°F	

Primary frequency response operating range for electric storage resources:

Minimum State of Charge:

Maximum State of Charge:

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 90 ° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (°F)	

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 50° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (°F)	

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 20° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (°F)	

**GREATEST UNIT RATING AT AMBIENT TEMPERATURE OF 0° OR ABOVE**

Gross Unit Rating (MW)	Gross Lagging (MVAR)
Net Unit Rating (MW)	Gross Leading (MVAR)
Station Service (MW)	Station Service (MVAR)
Temperature (°F)	

**COMBINED TURBINE-GENERATOR-EXCITER INERTIA DATA**

Inertia Constant, H	=	kW sec/kVA
Moment-of-Inertia, WR <sup>2</sup>	=	lb. ft. <sup>2</sup>

Attachment A (page 3)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

**REACTANCE DATA (PER UNIT-RATED KVA)**

<b>DIRECT AXIS</b>	<b>QUADRATURE AXIS</b>
--------------------	------------------------

Synchronous – saturated	X <sub>dv</sub>	X <sub>qv</sub>
Synchronous – unsaturated	X <sub>di</sub>	X <sub>qi</sub>
Transient – saturated	X' <sub>dv</sub>	X' <sub>qv</sub>
Transient – unsaturated	X' <sub>di</sub>	X' <sub>qi</sub>
Subtransient – saturated	X'' <sub>dv</sub>	X'' <sub>qv</sub>
Subtransient – unsaturated	X'' <sub>di</sub>	X'' <sub>qi</sub>
Negative Sequence – saturated	X <sub>2v</sub>	
Negative Sequence – unsaturated	X <sub>2i</sub>	

#### **FIELD TIME CONSTANT DATA (SEC)**

Zero Sequence – saturated	X <sub>0v</sub>	
Zero Sequence – unsaturated	X <sub>0i</sub>	
Leakage Reactance	X <sub>lm</sub>	
Open Circuit	T' <sub>qo</sub>	T' <sub>do</sub>
Three-Phase Short Circuit Transient	T' <sub>d3</sub>	T' <sub>q</sub>
Line to Line Short Circuit Transient	T' <sub>d2</sub>	
Line to Neutral Short Circuit Transient	T' <sub>d1</sub>	
Short Circuit Subtransient	T'' <sub>d</sub>	T'' <sub>q</sub>
Open Circuit Subtransient	T'' <sub>do</sub>	T'' <sub>qo</sub>

#### **ARMATURE TIME CONSTANT DATA (SEC)**

Three Phase Short Circuit	T <sub>a3</sub>
Line to Line Short Circuit	T <sub>a2</sub>
Line to Neutral Short Circuit	T <sub>a1</sub>

NOTE: If requested information is not applicable, indicate by marking “N/A.”

Attachment A (page 4)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

### **MW CAPABILITY AND PLANT CONFIGURATION**

#### **LARGE GENERATING FACILITY DATA**

#### **ARMATURE WINDING RESISTANCE DATA (PER UNIT)**

Positive	R1		
Negative	R2		
Zero	R0		
Rotor Short Time Thermal Capacity $I^2t$	=		
Field Current at Rated kVA, Armature Voltage and PF	=	amps	
Field Current at Rated kVA and Armature Voltage, 0 PF		amps	
Three Phase Armature Winding Capacitance	=	microfarad	
Field Winding Resistance	=	ohms	°C
Armature Winding Resistance (Per Phase)	=	ohms	°C

### CURVES

Provide Saturation, Vee, Reactive Capability, Capacity Temperature Correction curves. Designate normal and emergency Hydrogen Pressure operating range for multiple curves.



### GENERATOR STEP-UP TRANSFORMER DATA RATINGS

Capacity	Self-cooled/Maximum Nameplate	
	/	Kva
Voltage Ratio	Generator side/System side/Tertiary	
	/	kV
Winding Connections	Generator side/System Side/Tertiary (Delta or Wye)	
	/	

Fixed Taps Available

Present Tap Setting

#### IMPEDANCE

Positive	Z1 (on self-cooled kVA rating)	%	X/R
Zero	Z0 (on self-cooled kVA rating)	%	X/R

### **EXCITATION SYSTEM DATA**

Identify appropriate IEEE model block diagram of excitation system and power system stabilizer (“PSS”) for computer representation in power system stability simulations and the corresponding excitation system and PSS constants for use in the model.

### **GOVERNOR SYSTEM DATA**

Identify appropriate IEEE model block diagram of governor system for computer representation in power system stability simulations and the corresponding governor system constants for use in the model.

### **WIND AND INVERTER-BASED GENERATORS**

A completed Attachment A-1 Supplementary Wind and Inverter-Based Generating Facility Form to this Attachment A, must be supplied for all Interconnection Requests for wind and inverter-based Generating Facilities.

### **MODEL REQUIREMENTS**

For all Generating Facility types: A completed, fully functioning, public (*i.e.*, non-proprietary, non-confidential) Siemens PTI’s (“PSSE”) power flow model or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flow (“PSLF”) data sheet , must be supplied with this Attachment A. If additional public data sheets are more appropriate to the proposed device then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.

Attachment A (page 7)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

A PSCAD model for all wind and inverter-based Generating Facilities must be supplied with this Attachment A. If a PSCAD model is deemed required for other Generating Facility types at the Scoping Meeting, such PSCAD model must be provided to the System Operator within ninety (90) Calendar Days of the executed Interconnection System Impact Study Agreement. A benchmarking analysis, consistent with the requirements in the ISO New England Planning Procedures, confirming acceptable performance of the PSS/E model in comparison to the PSCAD model, shall be provided at the time PSCAD model is submitted.

**INDUCTION GENERATORS:**

- (\*) Field Volts:
- (\*) Field Amperes:
- (\*) Motoring Power (kW):
- (\*) Neutral Grounding Resistor (If Applicable):
- (\*)  $I_2^2t$  or K (Heating Time Constant):
- (\*) Rotor Resistance:
- (\*) Stator Resistance:
- (\*) Stator Reactance:
- (\*) Rotor Reactance:
- (\*) Magnetizing Reactance:
- (\*) Short Circuit Reactance:
- (\*) Exciting Current:
- (\*) Temperature Rise:
- (\*) Frame Size:
- (\*) Design Letter:
- (\*) Reactive Power Required In Vars (No Load):
- (\*) Reactive Power Required In Vars (Full Load):
- (\*) Total Rotating Inertia, H: Per Unit on KVA Base

Note: Please consult System Operator prior to submitting the Interconnection Request to determine if the information designated by (\*) is required.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment A to the Interconnection Request is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**SUPPLEMENTARY WIND AND INVERTER-BASED GENERATING FACILITY DATA FORM**

- a) Attach a Geographic Map Demonstrating the Project Layout and its Interconnection to the Power Grid. (Specify the name of the attachment here)
- b) Attach a Bus-Breaker Based One-line Diagram (The diagram should include each of the individual unit generators, generator number, rating and terminal voltage.) (Specify the name of the attachment here)

**i. Collection system detail impedance sheet**

If a collector system is used, attach a collector system data sheet in accordance with the one-line diagram attached above. The data sheet should include: the type, length  $Z_0$ ,  $Z_1$  and  $X_c/B$  of each circuit (feeder and collector string).

Specify the name of the attachment here: \_\_\_\_\_

**ii. Collection system aggregate (equivalent) model data sheet**

Attach an aggregate (equivalent) collection system data sheet. The data table should include: the type, length,  $Z_0$ ,  $Z_1$  and  $X_c/B$  of the equivalent circuits (feeders and collector strings).

Specify the name of the attachment here: \_\_\_\_\_

Attachment A-1 (page 2)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

- c) Summary of the Unit Models in the wind or inverter-based generating facility *(List all different unit models in the facility)*

Manufacturer Model	Type of this WTG* (if applicable)	Generator Unit Numbers in the field	Number(s) of these Units	Maximum Output of this Unit (MW)	Total MW

\* Type 1 – Cage rotor induction generators

Type 2 – Induction generators with variable rotor resistance

Type 3 – Doubly-fed asynchronous generators with rotor-side converter

Type 4 – Full-power converter interface

***Repeat the following sections from 4 to 12 for each different unit model.***

d) Unit Detail Information

Unit Manufacturer Model	
Terminal Voltage	
Rating of Each Unit (MVA)	
Maximum Gross Electrical Output (MW)	
Minimum Gross Electrical Output(MW)	
Lagging Reactive Power Limit at Rated Real Power Output (MVAR)	
Leading Reactive Power Limit at Rated Real Power Output (MVAR)	
Lagging Reactive Power Limit at Zero Real Power Output (MVAR)	
Leading Reactive Power Limit at Zero Real Power Output (MVAR)	
Station Service Load(MW, MVAR)	
Minimum short circuit ratio(SCR) requirement by manufacturer	
On which bus the minimum SCR is required by manufacturer	
What voltage level the minimum SCR is required by manufacturer	
Positive sequence Xsource	
Zero sequence Xsource	

e) Unit GSU – \_\_\_\_\_

Nameplate rating(MVA)	
Total number of the GSUs	
Voltages, generator side/system side	
Winding connections, low voltage/high voltage	
Available tap positions on high voltage side	
Available tap positions on low voltage side	
Will the GSU operate as an LTC?	
Desired voltage control range if LTC	
Tap adjustment time (Tap switching delay + switching time) if LTC	
Desired tap position if applicable	
Impedance, Z1, X/R ratio	
Impedance, Z0, X/R ratio	

f) Low Voltage Ride Through(LVRT) – \_\_\_\_\_(Specify the Manufacturer Model of this Unit)

Does each Unit have LVRT capability?

Yes\_\_ No\_\_

If yes, please provide:

i. Unit LVRT mode activation and release condition:

When operating at maximum real power, what is the Unit terminal voltage for LVRT mode activation? \_\_\_\_\_



When operating at maximum real power, what is the Unit terminal voltage for releasing LVRT mode after it is activated? \_\_\_\_\_

If there is different LVRT activation and release logic, please state here \_\_\_\_\_

- ii. A wind or other inverter-based generating facility technical manual from the manufacturer including description of LVRT functionality:

***Attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- iii. Does the wind or other inverter-based generating facility technical manual attached above include a reactive power capability curve?

Yes\_\_\_ No\_\_\_

***If no, attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- g) Low Voltage Protection (considering LVRT functionality)

(Specify the Manufacturer Model of this Unit)

Low Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

- h) High Voltage Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

Attachment A-1 (page 6)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

High Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

i) Low Frequency Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

Low Frequency Setting (Hz)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

j) High Frequency Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

High Frequency Setting (Hz)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

Please make sure the settings in sections 7 through 10 comply with NERC and NPCC standards for generator protection relays.

Attachment A-1 (page 7)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

k) Unit Reactive Power Control - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

i. What are the options for the Unit reactive power control (check all available)?

- \_\_\_\_ Control the voltage at the Unit terminal
- \_\_\_\_ Control constant power factor at the Unit terminal
- \_\_\_\_ Control constant power factor at the low side of the station main transformer
- \_\_\_\_ Control constant power factor at the high side of the station main transformer
- \_\_\_\_ Control voltage at the low side of the station main transformer
- \_\_\_\_ Control voltage at the high side of the station main transformer
- \_\_\_\_ Other options. Please describe if select others \_\_\_\_\_

ii. In all the control options selected above, please list the options in which the Unit is able to control its terminal voltage to prevent low/high voltage tripping.

\_\_\_\_\_

iii. What is the desired control mode from the selected options above? Specify the control plan in this mode. For example: control voltage at which bus to what schedule.

\_\_\_\_\_

**l) Wind or inverter-based generating facility Model**

***(All model files provided under this section 12 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)***

Attachment A-1 (page 8)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

**i. Power flow model**

i. A \*.RAW file including **aggregated/equivalent** wind or inverter-based generating facility power flow model with appropriate parameters and settings.

***Attach the \*.RAW file and specify the name of the attachment here:***

\_\_\_\_\_

- ii. A \*.RAW file including **detailed** wind or inverter-based generating facility power flow model with appropriate parameters and settings. *(Optional)*

***Attach the \*.RAW file and specify the name of the attachment here:***

---

- ii. Dynamic simulation model

***(Please note that the dynamic model must match the aggregated/equivalent power flow model provided above. Attach the following information for each of the models.)***

- i. Wind or inverter-based generating facility Model \_\_\_\_\_ (Please Specify the Manufacturer Model)

- ii. A compiled PSS/E dynamic model for the turbines (a \*.LIB or \*.OBJ file)

***Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:***

---

Attachment A-1 (page 9)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

- iii. A dynamic data file with appropriate parameters and settings for the turbines (typically a \*.DYR file)

***Attach the \*.DYR file and specify the name of the attachment here:***

---

- iv. PSS/E wind or inverter-based generating facility model user manual for the WTG

***Attach and specify the name of the attachment here:***

---

***Repeat the above sections from 6 to 12 for each different wind or inverter-based generating facility model.***

m) Power Plant Controller

Will the wind or inverter-based generating facility be equipped with power plant controller, which has the ability to centrally control the output of the units? Yes\_\_ No\_\_

If yes, please provide:

i. Manufacturer model of the power plant controller

\_\_\_\_\_

ii. What are the reactive power control strategy options of the power plant controller?

iii. Which of the control option stated above is being used in current operation?

\_\_\_\_\_

Attachment A-1 (page 10)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

iv. Is the power plant controller able to control the unit terminal voltages to prevent low/high voltage tripping?

Yes\_\_ No\_\_

Please provide the park controller technical manual from the manufacturer

***Attach the file and specify the name of the attachment here:***

\_\_\_\_\_

n) Station Transformer

Transformer Name	
Nameplate ratings (MVA)	
Total number of the main transformer(s)	
Voltage, High/Low/Tertiary (kV)	
Winding connections, High/Low Tertiary	
Available tap positions on high voltage side	
Available tap positions on low voltage side	
Will the transformer operate as a LTC?	
Desired voltage control range if LTC	

Attachment A-1 (page 11)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

Tap adjustment time (Tap switching delay + switching time) if LTC		
Desired tap position if applicable		
Tap adjustment time (Tap switching delay + switching time)		
Impedance $Z_1$ , X/R ratio	$Z_{1H-L}$	X/R
	$Z_{1H-T}$	X/R
	$Z_{1T-L}$	X/R
Impedance $Z_0$ , X/R ratio	$Z_{0H-L}$	X/R
	$Z_{0H-T}$	X/R
	$Z_{0T-L}$	X/R

- o) Dynamic Simulation Model for the Power Plant Controller(s) (if applicable )

***(All model files provided under this section 15 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)***

- i. A compiled PSS/E dynamic model for the power plant controller(s) (a \*.LIB or \*.OBJ file)

***Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:***

---

- ii. A dynamic data file with appropriate parameters and settings for the power plant controller(s) (typically a \*.DYR file).

***Please set the parameters in accordance with the currently used control mode.***

***Attach the \*.DYR file and specify the name of the attachment here:***

Attachment A-1 (page 12)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

---

- iii. PSS/E model user manual for the power plant controller(s)

***Attach the manual and specify the name of the attachment or specify the name of the attachment here:*** \_\_\_\_\_

- p) Capacitors and Reactors

Please provide necessary modeling data for all the capacitors and reactors belong to the facility, including: size, basic electrical parameters, connecting bus, switched or fixed, etc.

- q) Dynamic Device(s)

*(All model files provided under this section 17 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)*

- i. Provide necessary modeling data file for all the dynamic devices belong to the facility.

Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:

---

- 17.2 A dynamic data file containing the parameters for the units (typically a \*.DYR file).

Set the parameters in accordance with the desired control mode.

Attach the \*.DYR file and specify the name of the attachment here:

---

Attachment A-1 (page 13)  
To Attachment A of Appendix 1  
Supplementary Wind  
and Inverter-Based  
Generating Facility Form

- r) Collection System/Transformer Tap-Setting Design

Attach a collection system/transformer tap-setting design calculations, consistent with the requirements in the ISO New England Planning Procedures, that identify the calculations to support the proposed tap settings for the unit step-up transformers and the station step-up transformers.

Attached the design document and specify the name of the attachment here:

---

- s) Additional Information

Are there any special features available to be implemented to the wind or inverter-based generating facility? Such as weak grid interconnection solutions, etc.

Specify the available features here:

---



***Insert the technical manual for each of the features listed above as objects (display as icons) or specify the name of the attachment here:***

---

- t) Provide PSCAD Model and Documentation for the wind or inverter-based generating facility, the Power Plant Controller(s) and Other Dynamic Devices for the wind or inverter-based generating facility.

***ISO will determine how much PSCAD work is needed from the wind or inverter-based generating facility based on its interconnection system conditions.***

Attachment A-2  
To Attachment A of Appendix 1  
Cluster System Impact Study  
Application Form

### **CLUSTER SYSTEM IMPACT STUDY APPLICATION FORM**

The undersigned Interconnection Customer submits this form to request the inclusion of the Interconnection Request for its Large Generating Facility in a Cluster Interconnection System Impact Study pursuant to Section 4.2.3.2.2 of this LGIP.

To be included in a Cluster Interconnection System Impact Study, the following must be submitted together with this form to the System Operator by the Cluster Entry Deadline:

1. Project Information:

a. Project Name: \_\_\_\_\_

(a) Queue Position: \_\_\_\_\_

- (b) Is the Interconnection Request contractually associated with an Interconnection Request for an Elective Transmission Upgrade? Yes \_\_\_\_ No \_\_\_\_

If yes, identify Queue Position of the associated Interconnection Request and provide evidence of the contractual commitment. Queue Position No.: \_\_\_\_

2. Initial Cluster Participation Deposit as specified in Section 4.2.3.2.2

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**The technical data required below must be submitted no later than the date of execution of the Feasibility Study Agreement pursuant to Section 6.1 of the LGIP.**

**Complete all fields. If field is not applicable, state “N/A”.**

**A. LARGE GENERATING FACILITY DATA**

(Aggregated data for all units at the Generating Facility)

	0°F	50°F
1. Total gross Generating Facility rated real power output (MW)		
2. Total gross lagging reactive capability of generator(s) at rated output (MVAR)		
3. Total gross leading reactive capability of generator(s) at rated output (MVAR)		
4. Total station service load (MW)		
5. Total station service load (MVAR)		

## B. INDIVIDUAL GENERATING UNIT DATA

(Repeat the relevant table for each distinct type of generating unit utilized at the facility)

(Greatest unit rating at ambient temperature of 50°F or above)

<b>Synchronous Generators</b>	
1. Generating unit manufacturer	
2. Generating unit model	
3. Number of generating units	
4. Generating unit gross rated real power output (MW)	
5. Generating unit gross lagging reactive capability at rated output (MVAR)	
6. Generating unit gross leading reactive capability at rated output (MVAR)	
7. Generator rated MVA	
8. Station service (MW)	
9. Station service (MVAR)	
10. Net generator output (MW)	
11. Net generator output (MVAR)	
12. Nominal terminal voltage (kV)	
13. Rated power factor (%)	
14. Direct axis, positive sequence, sub-transient reactance on generator base in per unit, $X''_{dv}$ (Unsaturated)	
15. Positive sequence, generator AC resistance on generator base in per unit, $R_a$	

Technical Data Required For  
Interconnection Feasibility Study

<b>Wind Turbine Generators</b>	
1. Wind turbine manufacturer	
2. Wind turbine model	
3. Number of wind turbines	
4. Wind turbine type (1/2/3/4)	
5. Wind turbine unit rated output (MW)	
6. Wind turbine unit gross lagging reactive capability at rated output and at nominal terminal voltage (MVAR)	
7. Wind turbine unit gross leading reactive capability at rated output and at nominal terminal voltage (MVAR)	
8. Wind turbine converter rated MVA (Type 3 & 4)	
9. Nominal terminal voltage (kV)	
10. Rated power factor (%)	
11. Direct axis, positive sequence, sub-transient reactance on generator base, $X''_{dv}$ (Unsaturated) in per unit	
12. Positive sequence, generator AC resistance on generator base in per unit, $R_a$	

<b>Non-Wind Inverter-Based Generators</b>	
1. Inverter manufacturer	
2. Inverter model	
3. Number of inverters	
4. Inverter unit rated output (MW)	
5. Inverter unit gross lagging reactive capability at rated output and at nominal terminal voltage (MVAR)	
6. Inverter unit gross leading reactive capability at rated output and at nominal terminal voltage (MVAR)	
7. Inverter rated MVA	
8. Nominal terminal voltage (kV)	
9. Rated power factor (%)	
<b>Additional Data for Battery Energy Storage System (BESS)</b>	
10. Maximum charging power (MW)	
11. Will BESS be charged from the Administered Transmission System? (Yes/No)	

### C. GENERATOR SHORT CIRCUIT DATA

(Repeat the relevant table for each distinct type of generating unit utilized at the facility)

<b>Synchronous Generator(s)</b>		
MVA base for data		
kV base for data		
	R (per unit)*	X (direct axis, saturated) (per unit)*
1. Subtransient		
2. Transient		
3. Synchronous		
4. Negative Sequence		
5. Zero Sequence		
6. Connection (delta, grounded WYE, ungrounded WYE, impedance grounded)		
7.a. Ground resistance if impedance grounded (per unit)		
7.b. Ground reactance if impedance grounded (per unit)		

\* Provide impedance in per unit on the generator MVA base

Technical Data Required For  
Interconnection Feasibility Study

<b>Inverter-Based Resources (including Type 3 &amp; 4 Wind Turbine)</b>	
Full load current magnitude (Amps) per inverter	
Instantaneous controlled fault current magnitude (Amps) per inverter	

**D. TRANSFORMER RATINGS DATA**

(Repeat the table for each distinct type of station generator step-up transformer utilized at the facility)

Station generator step-up transformer (Station Transformer)			
Number of Station Transformer(s)			
	Self-cooled	Maximum nameplate	
Capacity (kVA)			
	Generator side	System side	Tertiary
Voltage ratio (kV)			
	Low voltage	High voltage	Tertiary voltage
Winding connections (Delta or Wye)			
	Tap settings		
Fixed taps available		Present tap setting	



## Interconnection Feasibility Study

(Repeat the table for each distinct type of generating unit step-up transformer utilized at the facility)

Generating unit step-up transformer (GSU) (Wind turbine and inverter-based Generating Facilities)			
Number of GSU(s)			
	Self-cooled	Maximum nameplate	
Capacity (kVA)			
	Generator side	System side	Tertiary
Voltage ratio (kV)			
	Low voltage	High voltage	Tertiary voltage
Winding Connections (Delta or Wye)			
	Tap settings		
Fixed taps available		Present tap setting	

### E. TRANSFORMER IMPEDANCE DATA

(Repeat the table for each distinct type of GSU transformer and station transformer on self-cooled kVA rating)

2-Winding Transformer			
Data For (Check One)	GSU	Station Transformer	
MVA Base for Data			
	R (p.u.)	X (p.u.)	X/R
Positive Sequence			
Zero Sequence			

3-Winding Transformer				
Data For (Check One)	GSU	Station Transformer		
MVA Base for Data				
	R (p.u.)	X (p.u.)	X/R	Positive Sequence
High Side-Low Side				
High Side-Tertiary				
Low Side-Tertiary				
High Side-Low Side				Zero Sequence
High Side-Tertiary				
Low Side-Tertiary				

#### F. COLLECTOR SYSTEM EQUIVALENCE IMPEDANCE DATA FOR WIND/PHOTOVOLTAIC PLANTS

(Provide data below in per unit on 100 MVA and nominal line voltage (kV) base. Do not include Station Transformer impedance)

1. Nominal voltage (kV)		
2. Positive sequence resistance (R1) , reactance (X1)		
3. Zero sequence resistance (R0), reactance (X0)		
4. Total branch charging susceptance, B		

Attachment B (page 9)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

#### G. INTERCONNECTION FACILITIES TIE LINE DATA

(Provide data below in per unit on 100 MVA and nominal line voltage (kV) base)

(Only list data for lines that are to be added by the generation developer)

1. Nominal Voltage (kV)	
-------------------------	--

2. Line termination points (The proposed line will connect point 2.a with point 2.b)	2.a.	
	2.b.	
3. Positive sequence resistance (R1) , reactance (X1)		
4. Zero sequence resistance (R0), reactance (X0)		
5. Total branch charging susceptance, B		

**In addition, provide the following data:**

13 Reactive capability curve

14 For synchronous generator(s)

15. A complete Siemens PTI (“PSSE”) format steady state power flow model of the Generating Facility (including Interconnection Facilities tie-line, if applicable)

16. A short-circuit model of the Generating Facility (including Interconnection Facilities tie-line, if applicable) in ASPEN OneLiner (.OLR) format

15 For collector-based Generating Facilities

15.1 A complete Siemens PTI (“PSSE”) format steady state power flow single-machine equivalent model shall be used for each major feeder branch of the Generating Facility as described in Planning Procedure 5-6 (Interconnection Planning Procedure for Generation and Elective Transmission Upgrades)

15.2 A single-machine equivalent short-circuit model of the Generating Facility (including Interconnection Facilities tie-line, if applicable) in ASPEN OneLiner (.OLR) format

Attachment B (page 10)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment B to the Interconnection Request is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**SURPLUS INTERCONNECTION SERVICE REQUEST APPLICATION**

The Surplus Interconnection Customer submits this application to request Surplus Interconnection Service pursuant to Section 3.3 of this LGIP.

**SURPLUS INTERCONNECTION CUSTOMER AND ORIGINAL INTERCONNECTION  
CUSTOMER INFORMATION**

Surplus Interconnection Customer Company Name: \_\_\_\_\_

ISO Customer ID# (If available): \_\_\_\_\_

Company Address:

PO Box No.: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Company Representative:      Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Representative's Company and Address (if different from above):

Company Name: \_\_\_\_\_

PO Box No.: \_\_\_\_\_

Attachment C (page 2)  
To Appendix 1  
Surplus Interconnection Service  
Request Application

Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_ E-mail: \_\_\_\_\_

Original Interconnection Customer Company Name: \_\_\_\_\_

ISO Customer ID# (If available): \_\_\_\_\_

Company Address:

PO Box No.: \_\_\_\_\_

Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Company Representative: Name: \_\_\_\_\_

Title: \_\_\_\_\_

Company Representative's Company and Address (if different from above):

Company Name: \_\_\_\_\_

PO Box No.: \_\_\_\_\_

Attachment C (page 3)  
To Appendix 1  
Surplus Interconnection Service  
Request Application

Street Address: \_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_ FAX: \_\_\_\_\_ email: \_\_\_\_\_

---

---

### **PROJECT INFORMATION**

Description of the Original Interconnection Customer's existing, commercial Large Generating Facility:

---

---

Description of the Surplus Interconnection Customer's Generating Facility:

---

---

Select Type of Interconnection Service for the Surplus Interconnection Customer's Generating Facility:

☐ CNR Interconnection Service

☐ NR Interconnection Service

Specify the amount of Unused Capability at the corresponding CNR Interconnection Service or NR Interconnection Service available for the Surplus Interconnection Customer's Generating Facility:

---

---

Attachment C (page 4)  
To Appendix 1  
Surplus Interconnection Service  
Request Application

Requested Commercial Operations Date for the Surplus Interconnection Customer's Generating Facility:

---

Requested Initial Synchronization Date for the Surplus Interconnection Customer's Generating Facility:

---

Requested In-Service Date for the Surplus Interconnection Customer's Generating Facility:

---

To request Surplus Interconnection Service, the Surplus Interconnection Customer shall provide the following, together with this Surplus Interconnection Service Request Application:

- 11 The Original Interconnection Customer's written consent for the Surplus Interconnection Customer's Generating Facility to use Unused Capability associated with Interconnection Service established under the Interconnection Agreement for the Original Interconnection Customer's Generating Facility, together with a copy of that Interconnection Agreement;
- 12 A detailed description of the Original Interconnection Customer's Generating Facility and the Surplus Interconnection Customer's Generating Facility and their respective Interconnection Facilities and existing Point of Interconnection and Point of Change of Ownership, together with a completed Attachment A and Attachment A-1, as applicable, to Appendix 1 of this LGIP, including a site electrical one-line diagram reflecting both the Original Interconnection Customer's Generating Facility and the proposed Surplus Interconnection Customer's Generating Facility and a plot plan; and
- 13 Site Control for the Surplus Interconnection Customer's Generating Facility.

Attachment C (page 5)  
To Appendix 1  
Surplus Interconnection Service  
Request Application

System Operator and Interconnecting Transmission Owner reserve the right to request additional technical and non-technical information necessary from the Original Interconnection Customer or the Surplus



Interconnection Customer as may reasonably become necessary to facilitate their review of the Surplus Interconnection Service request.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

Authorized Signature: \_\_\_\_\_

Name (type or print): \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**APPENDIX 2**  
**INTERCONNECTION FEASIBILITY STUDY AGREEMENT**

THIS AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Large Generating Facility to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection Procedures (“LGIP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).

- 2.0 Interconnection Customer elects and System Operator shall cause to be performed an Interconnection Feasibility Study consistent with Section 6.0 of the LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in Attachment A (and Attachment A-1, if applicable) or Attachment B to the Interconnection Request, as may be modified as the result of the Scoping Meeting. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 3.4.4 of the LGIP. If, after the designation of the Point of Interconnection pursuant to Section 3.4.4 of the LGIP, Interconnection Customer modifies its Interconnection Request pursuant to Section 4.4, the time to complete the Interconnection Feasibility Study may be extended.
- 5.0 The Interconnection Feasibility Study report shall provide the following information depending on whether the Feasibility Study consisted of (a) a limited power flow, including thermal analysis and voltage analysis, and short circuit analysis, or (b) limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, or electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Large Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting:
- If the study consisted of a limited power flow, including thermal analysis, voltage analysis, and short circuit analysis, preliminary identification of: (1) any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection; (2) any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection; (3) Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating

Facility, together with a non-binding good faith order of magnitude estimated cost of (unless the Interconnection Customer waives such cost estimate) and the time to construct such facilities as identified within the scope of the analysis performed; or

- If the study consisted of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, or electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Large Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting: (1) the study findings; and (2) preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless Interconnection Customer waives such cost) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Large Generating Facility as identified within the scope of the analysis performed as part of the study.

In accordance with the LGIP, in performing the Interconnection Feasibility Study, System Operator and Interconnecting Transmission Owner shall coordinate with each other and Affected Parties, and shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study and the development of this Interconnection Feasibility Study Agreement and its attachment(s). Interconnecting Transmission Owner's and System Operator's good faith estimate for the time of completion of the Interconnection Feasibility Study Agreement is [insert date].

The total estimated cost of the performance of the Interconnection Feasibility Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_. Any difference between the deposit and the actual cost of the Interconnection Feasibility Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Feasibility Study System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study.

Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Feasibility Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Feasibility Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Feasibility Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Feasibility Study, the content of the Interconnection Feasibility Study, or the conclusions of the Interconnection Feasibility Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or an Interconnecting Transmission

Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or an Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Feasibility Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Feasibility Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.



- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

Interconnecting Transmission Owner

By:

By:

Title:

Title:

Date:

Date:

[Insert name of Interconnection Customer]

By:

Title:

Date:

Attachment A to  
Appendix 2  
Interconnection Feasibility  
Study Agreement

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION FEASIBILITY STUDY**

The Interconnection Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]



**APPENDIX 3**  
**INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility to the Administered Transmission System;

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection Feasibility Study (the “Feasibility Study”) and provided the results of said study to the Interconnection Customer (This recital is to be omitted if Interconnection Customer has elected to forego the Interconnection Feasibility Study); and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection Procedure (“LGIP”).
- 2.0 Interconnection Customer elects and System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection System Impact Study consistent with Section 7.0 of the LGIP in accordance with the Tariff.
- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study unless Interconnection Customer did not pursue the Interconnection Feasibility Study, and the technical information provided by Interconnection Customer in Attachment A (and Attachment A-1 as applicable) to the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection;
  - identification of any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection;
  - initial review of grounding requirements and electric system protection;
  - identification of any instability or inadequately damped response to system disturbances resulting from the interconnection;

- description and non-binding, good faith estimated cost of and the time to construct the facilities required to interconnect the Large Generating Facility to the Administered Transmission System and to address the identified short circuit, instability, and power flow issues; and
- to the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.4 of the LGIP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

6.0 The Interconnection Customer is providing a deposit equal to:

- i. the greater of 100 percent of the estimated cost of the Interconnection System Impact Study or \$250,000;  
or
- ii. the lower of 100 percent of the estimated cost of the Interconnection System Impact Study or \$50,000, if the Interconnection Customer is providing herewith either:
  - (a) evidence of applications for all Major Permits, as defined in Section III.13.1.1.2.2.2(a) of the Tariff, required in support of the Interconnection Request, or provide certification that Major Permits are not required or
  - (b) evidence acceptable to the System Operator of At-Risk Expenditures (excluding study costs) totaling at least the amounts of money described in (i) above.
 or
- iii the lower of 100 percent of the estimated costs of the study or \$50,000 if the Interconnection Request is for a modification to an existing Large

Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.

The deposit shall be applied toward the cost of the Interconnection System Impact Study and the development of this Interconnection System Impact Study Agreement and its attachment(s) and the LGIA. Interconnecting Transmission Owner's and System Operator's good faith estimate for the times of commencement and completion of the Interconnection System Impact Study is [insert dates].

The total estimated cost of the performance of the Interconnection System Impact Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection System Impact Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study.

System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study each month. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

In accordance with the LGIP, in performing the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

## 7.0 Miscellaneous.

- 7.1 Accuracy of Information. Except as a Party (“Providing Party”) may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.
- 7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection System Impact Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection System Impact Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection System Impact Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection System Impact Study, the content of the Interconnection System Impact Study, or the conclusions of the Interconnection System Impact Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.
- 7.3 Force Majeure, Liability and Indemnification.
- 7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement



is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

- 7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, an Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities (“Losses”) by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection System Impact Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.

7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection System Impact Study is completed. This

Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.

- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision,

rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.

7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.

7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

Interconnecting Transmission Owner

By:

By:

Title:

Title:

Date:

Date:

[Insert name of Interconnection Customer]

By:

Title:

Date:

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION SYSTEM IMPACT STUDY**

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study unless Interconnection Customer did not pursue the Interconnection Feasibility Study, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration. [Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]

**APPENDIX 4**  
**INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated ; and

**WHEREAS**, Interconnection Customer desires to interconnect the Large Generating Facility to the Administered Transmission System; and

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection System Impact Study (the “System Impact Study”) and provided the results of said study to the Interconnection Customer; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Large Generating Facility to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection Procedures (“LGIP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 Interconnection Customer elects and System Operator shall cause an Interconnection Facilities Study consistent with Section 8.0 of the LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), and schedule for required facilities to interconnect the Large Generating Facility to the Administered Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 The Interconnection Customer is providing a deposit equal to:
  - i. the greater of 25 percent of the estimated cost of the Interconnection Facilities Study or \$250,000;  
or
  - ii. the greater of 100 percent of the estimated monthly cost of the Interconnection Facilities Study Agreement or \$100,000, if the Interconnection Customer can provide either:
    - (a) evidence of application for all Major Permits, as defined in Section III.13.1.1.2.2(a) of the Tariff, required in support of the Interconnection Request, or provide certification that Major Permits are not required or

- (b) evidence acceptable to the System Operator of At-Risk Expenditures (excluding Interconnection Study costs) totaling at least the amount of the money in (i) above, not including the At-Risk Expenditures demonstrated with the Interconnection System Impact Study Agreement, if applicable.

or

- iii. the greater of 100 percent of one month's estimated study cost or \$100,000, if the Interconnection Request is for a modification to an existing Large Generating Facility that does not increase the energy capability or capacity capability of the Large Generating Facility.

The deposit shall be applied toward the cost of the Interconnection Facilities Study and the development of this Interconnection Facilities Study Agreement and its attachment(s) and the LGIA. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

The total estimated cost of the performance of the Interconnection Facilities Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Facilities Study, System Operator and Interconnecting Transmission Owner shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study. System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.



In accordance with the LGIP, in performing the Interconnection Facilities Study, Interconnecting Transmission Owner and System Operator shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

6.0 Miscellaneous.

6.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

6.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Facilities Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Facilities Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Facilities Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Facilities Study, the content of the Interconnection Facilities Study, or the conclusions of the Interconnection Facilities Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 6.3 Force Majeure, Liability and Indemnification.

6.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

6.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers,

employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 6.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 6.4 Third-Party Beneficiaries. Without limiting Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Facilities Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 6.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Facilities Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 6.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 6.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 6.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 6.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 6.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.

- 6.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 6.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 6.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 6.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

By:

Title:

Date:

Interconnecting Transmission Owner

By:

Title:

Date:

[Insert name of Interconnection Customer]

By:

Title:

Date:

**INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE  
INTERCONNECTION FACILITIES STUDY**

Interconnection Customer elects (check one):

- b. +/- 20 percent cost estimate contained in the Interconnection Facilities Study report.
- c. +/- 10 percent cost estimate contained in the Interconnection Facilities Study report.

Interconnecting Transmission Owner and System Operator shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to the Interconnection Customer within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:

- ninety (90) Calendar Days with no more than a +/- 20 percent cost estimate contained in the report, or
- one hundred eighty (180) Calendar Days with no more than a +/- 10 percent cost estimate contained in the report.

**DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER  
WITH THE  
INTERCONNECTION FACILITIES STUDY AGREEMENT**

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

One set of metering is required for each generation connection to the new ring bus or existing New England Transmission System station. Number of generation connections:

On the one line indicate the generation capacity attached at each metering location. (Maximum load on Current Transformer/Power Transformer (“CT/PT”))

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes \_\_\_\_\_ No \_\_\_\_\_

(Please indicate on one line).

What type of control system or Power Line Carrier (“PLC”) will be located at the Interconnection Customer’s Large Generating Facility?

What protocol does the control system or PLC use?



Attachment B (page 2)  
Appendix 4  
Interconnection Facilities  
Study Agreement

Please provide a 7.5-minute quadrangle of the site. Sketch the plant, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from generation to interconnection station:

Line length from interconnection station to Interconnecting Transmission Owner's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with System Operator and Interconnecting Transmission Owner.

Is the Large Generating Facility in Interconnecting Transmission Owner's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ Local provider:

Please provide proposed schedule dates:

Begin Construction Date:

Generator step-up transformer Date:

Receives back feed power Date

Generation Testing Date:

Commercial Operation Date:

**APPENDIX 5**  
**OPTIONAL INTERCONNECTION STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer is proposing to establish an interconnection to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has submitted to System Operator an Interconnection Request; and

**WHEREAS**, on or after the date when the Interconnection Customer receives the Interconnection System Impact Study results, Interconnection Customer has further requested that the System Operator and Interconnecting Transmission Owner prepare an Optional Interconnection Study.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Large Generator Interconnection

Procedures (“LGIP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).

- 2.0 Interconnection Customer elects and System Operator shall cause an Optional Interconnection Study consistent with Section 10.0 of the LGIP to be performed in accordance with the Tariff.
- 3.0 The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Optional Interconnection Study shall be performed solely for informational purposes.
- 5.0 The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify Interconnecting Transmission Owner’s Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the assumptions specified by the Interconnection Customer in Attachment A.  
  
In accordance with the LGIP, in performing the Optional Interconnection Study, the System Operator shall coordinate with Interconnecting Transmission Owner and Affected Parties, and shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.
- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. Interconnecting Transmission Owner’s and System Operator’s good faith estimate for the time of completion of the Optional Interconnection Study is [insert date].

The total estimated cost of the performance of the Optional Interconnection Study consists of \$\_\_\_\_\_ which is comprised of the System Operator’s estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner’s estimated cost of \$\_\_\_\_\_.

Any difference between the initial payment and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate. Upon receipt of the Optional Interconnection Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Optional Interconnection Study. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of invoice.

7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Optional Interconnection Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Optional Interconnection Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Optional Interconnection Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Optional Interconnection Study, the content of the Optional Interconnection Study, or the conclusions of the Optional Interconnection Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission

Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owners under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Optional Interconnection Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Optional Interconnection Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.7 of the LGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located, without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.

- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instances; rather, the same shall be and remain in full force and effect.
- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

System Operator

Interconnecting Transmission Owner

By:

By:

Title:

Title:

Date:

Date:

[Insert name of Interconnection Customer]



By:

Title:

Date:

Attachment A

Appendix 5

Optional Interconnection

Study Agreement

**ASSUMPTIONS USED IN CONDUCTING  
THE OPTIONAL INTERCONNECTION STUDY**

[To be completed by Interconnection Customer consistent with Section 10 of the LGIP.]

**APPENDIX 6**  
**LARGE GENERATOR INTERCONNECTION**  
**AGREEMENT**

**TABLE OF CONTENTS**

Article 1	Definitions
Article 2	Effective Date, Term and Termination
Article 3	Regulatory Filings
Article 4	Scope of Service
Article 5	Interconnection Facilities Engineering, Procurement, and Construction
Article 6	Testing and Inspection
Article 7	Metering
Article 8	Communications
Article 9	Operations
Article 10	Maintenance
Article 11	Performance Obligation
Article 12	Invoice
Article 13	Emergencies
Article 14	Regulatory Requirements and Governing Law
Article 15	Notices
Article 16	Force Majeure
Article 17	Default
Article 18	Indemnity, Consequential Damages and Insurance
Article 19	Assignment
Article 20	Severability
Article 21	Comparability
Article 22	Confidentiality
Article 23	Environmental Releases
Article 24	Information Requirements
Article 25	Information Access and Audit Rights
Article 26	Subcontractors
Article 27	Disputes

Article 28	Representations, Warranties and Covenants
Article 29	Omitted
Article 30	Miscellaneous

## **THIS STANDARD LARGE GENERATOR INTERCONNECTION AGREEMENT**

("Agreement") is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Large Generating Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnecting Transmission Owner"). Under this Agreement, the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a "Party" or collectively as the "Parties."

### **RECITALS**

**WHEREAS**, System Operator is the central dispatching agency provided for under the Transmission Operating Agreement ("TOA") which has responsibility for the operation of the New England Control Area from the System Operator control center and the administration of the Tariff; and

**WHEREAS**, Interconnecting Transmission Owner is the owner or possessor of an interest in the Administered Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Generating Facility identified as a Large Generating Facility in Appendix C to this Agreement; and

**WHEREAS**, System Operator, Interconnection Customer and Interconnecting Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the Large Generating Facility to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this Standard Large Generator Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

## **ARTICLE 1. DEFINITIONS**

The definitions contained in this Article 1 and those definitions embedded in an Article of this Agreement are intended to apply in the context of the generator interconnection process provided for in Schedule 22 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of generator interconnections under Schedule 22. Capitalized terms in Schedule 22 that are not defined in this Article 1 shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF and the Non-PTF.

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**At-Risk Expenditure** shall mean money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (i) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and surveys, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** shall have the meaning specified in Section 2.3 of the Large Generator Interconnection Procedures (“LGIP”).

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability data bases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Standard Large Generator Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Standard Large Generator Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including

protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** shall mean that portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** shall mean the MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Large Generating Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.



**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** of a unit shall mean the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Standard Large Generator Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise.

Confidential Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Contingent Facilities** shall mean those unbuilt Interconnection Facilities and Network Upgrades associated with an Interconnection Request with a higher Queue Position or a transmission project that is planned or proposed for the New England Transmission System upon which the Interconnection Request's costs, timing, and study findings are dependent, and if delayed or not built, could cause a need for restudies of the Interconnection Request or a reassessment of the Interconnection Facilities and/or Network Upgrades and/or costs and timing.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Standard Large Generator Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Generating Facility and render the transmission service necessary to effect Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Standard Large Generator Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting

Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Generating Facility or Interconnection Customer's Interconnection Facilities. System restoration and black start shall be considered Emergency Conditions; provided that Interconnection Customer is not obligated by the Standard Large Generator Interconnection Agreement to possess black start capability.

**Engineering & Procurement ("E&P") Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a *et seq.*

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** shall mean Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the

Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**Initial Synchronization Date** shall mean the date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** shall mean a Transmission Owner that owns, leases or otherwise possesses an interest in, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Large Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Standard Large Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Generating Facility with the Administered Transmission System under the Standard Large Generator Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Standard Large Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 8 of the Standard Large Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 6 of the Standard Large Generator Interconnection Procedures.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** (a) shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Standard Large Generator Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of an existing Generating Facility; (iv) make a Material Modification to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System; (v) commence participation in the wholesale markets by an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service. Interconnection Request shall not include a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** shall mean the service provided by System Operator and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional Interconnection Study described in the Standard Large Generator Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other Affected System, the scope of which is described in Section 7 of the Standard Large Generator Interconnection Procedures. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Standard Large Generator Interconnection Procedures.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Standard Large Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**IRS** shall mean the Internal Revenue Service.

**Large Generating Facility** shall mean a Generating Facility having a maximum gross capability at or above zero degrees F of more than 20 MW.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff..

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party’s performance, or non-

performance of its obligations under the Standard Large Generator Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2(a) of the Tariff.

**Material Modification** shall mean (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A (and Attachment A-1, if applicable) to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Initial Synchronization Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer's control; or (iv) except as provided in Section 3.2.3.4 of the LGIP, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6 of the LGIP, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed at the Generating Facility pursuant to the Standard Large Generator Interconnection Agreement at the metering points, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard ("NC Interconnection Standard")** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the



reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Resource (“NR”)** shall mean the portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** shall mean the MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s NR Interconnection Service shall be solely for the megawatt amount of the NR Capability requested pursuant to Section 3.1 of the LGIP. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Large Generating Facility to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Standard Large Generator Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Standard Large Generator Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Customer's Interconnection Facilities connect to Interconnecting Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point, as set forth in Appendix A to the Standard Large Generator Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Provisional Interconnection Service** shall mean Network Resource Interconnection Service provided by the System Operator, and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability from the Generating Facility at the Point of Interconnection on a limited and temporary basis, pursuant to the terms of the Provisional Large Generator Interconnection Agreement and, if applicable, the Tariff.

**Provisional Large Generator Interconnection Agreement** shall mean the Interconnection Agreement for Provisional Interconnection Service established between the System Operator, the Interconnecting Transmission Owner, and the Interconnection Customer. This agreement shall take the form of the Standard Large Generator Interconnection Agreement, modified for provisional purposes.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a "higher-queued" Interconnection Request shall mean one that has been received by the System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as "lower-queued."

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Standard Large Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for which new interconnection is sought; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for which new interconnection is sought; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for which new interconnection is sought; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for which new interconnection is sought; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property.

**Stand Alone Network Upgrades** shall mean Network Upgrades that are not part of an Affected System that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Standard Large Generator Interconnection Agreement. If the System Operator, Interconnecting Transmission Owner, and Interconnection Customer disagree about whether a particular Network Upgrade is a Stand Alone Network Upgrade, the System Operator must provide the Interconnection Customer a written technical explanation outlining why the System Operator does not consider the Network Upgrade to be a Stand Alone Network Upgrade within 15 days of its determination.

**Standard Large Generator Interconnection Agreement (“LGIA”)** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to a Large Generating Facility, that is included in this Schedule 22 to the Tariff.

**Standard Large Generator Interconnection Procedures (“LGIP”)** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to a Large Generating Facility that are included in this Schedule 22 to the Tariff.

**Surplus Interconnection Service** shall mean a form of Interconnection Service that allows an Interconnection Customer to use any Unused Capability of Interconnection Service established in an Interconnection Agreement for an existing Generating Facility that has achieved Commercial Operation, such that if Surplus Interconnection Service is utilized the total amount of Interconnection Service at the same Point of Interconnection would remain the same.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this LGIP.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or other electrical disturbances occurring at the Generating Facility and (2) the Generating Facility from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Unused Capability** shall mean: (i) in the case of NR Interconnection Service at an existing, commercial Generating Facility, the MW quantity as determined by the Original Interconnection Customer (as defined in Section 3.3 of the LGIP), not to exceed the existing, commercial Generating Facility’s NR Interconnection Service; and (ii) in the case of CNR Interconnection Service at an existing, commercial Generating Facility, for Summer, the Summer CNR Capability minus the latest Summer Qualified Capacity, and for Winter, the Winter CNR Capability minus the latest Winter Qualified Capacity.

## ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION

- 2.1 Effective Date.** This LGIA shall become effective upon execution by the Parties subject to acceptance by the Commission (if applicable), or if filed unexecuted, upon the date specified by the Commission. System Operator and Interconnecting Transmission Owner shall promptly and jointly file this LGIA with the Commission upon execution in accordance with Section 11.3 of the LGIP and Article 3.1, if required.
- 2.2 Term of Agreement.** This LGIA, subject to the provisions of Article 2.3, and by mutual agreement of the Parties, shall remain in effect for a period of \_\_\_\_\_ years from the Effective Date (*term to be specified in individual Agreement, but in no case should the term be less than ten (10) years from the Effective Date or such other longer period as the Interconnection Customer may request*) and shall be automatically renewed for each successive one-year period thereafter.
- 2.3 Termination Procedures.**
- 2.3.1 Written Notice.** This LGIA may be terminated by the Interconnection Customer, subject to continuing obligations of this LGIA and the Tariff, after giving the System Operator and Interconnecting Transmission Owner ninety (90) Calendar Days advance written notice, or by System Operator or Interconnecting Transmission Owner notifying the Commission after a Generating Facility retires pursuant to the Tariff, provided that if an Interconnection Customer exercises its right to terminate on ninety (90) Calendar Days, any reconnection would be treated as a new interconnection request; or this LGIA may be terminated by Interconnecting Transmission Owner or System Operator by notifying the Commission after the Generating Facility permanently ceases Commercial Operation.
- 2.3.2 Default.** Each Party may terminate this LGIA in accordance with Article 17. Notwithstanding Articles 2.3.1 and 2.3.2, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing, if applicable, with the Commission of a notice of termination of this LGIA, which notice has been accepted for filing by the Commission. Termination of the LGIA shall not supersede or alter any requirements for deactivation or

retirement of a generating unit under ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**2.4 Termination Costs.** If a Party elects to terminate this LGIA pursuant to Article 2.3 above, each Party shall pay all costs incurred (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by the other Party(ies), as of the date of such Party's(ies') receipt of such notice of termination, that are the responsibility of such Party(ies) under this LGIA. In the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this LGIA, unless otherwise ordered or approved by the Commission:

2.4.1 With respect to any portion of the Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades to the extent covered by this LGIA, that have not yet been constructed or installed, the Interconnecting Transmission Owner shall to the extent possible and with Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event Interconnection Customer elects not to authorize such cancellation, Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Interconnecting Transmission Owner shall deliver such material and equipment, and, if necessary, and to the extent possible, assign such contracts, to Interconnection Customer as soon as practicable, at Interconnection Customer's expense. To the extent that Interconnection Customer has already paid Interconnecting Transmission Owner for any or all such costs of materials or equipment not taken by Interconnection Customer, either (i) in the case of overpayment, Interconnecting Transmission Owner shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by the Interconnecting Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts, or (ii) in the case of underpayment, Interconnection Customer shall promptly pay such amounts still due plus any costs, including penalties incurred by Interconnecting Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this LGIA, it shall be responsible for all costs incurred in association with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment, and other expenses including any Network Upgrades for which the Interconnecting Transmission Owner has incurred expenses and has not been reimbursed by the Interconnection Customer.

2.4.2 Interconnecting Transmission Owner may, at its option, retain any portion of such materials, equipment, or facilities that Interconnection Customer chooses not to accept delivery of, in which case Interconnecting Transmission Owner shall be responsible for all costs associated with procuring such materials, equipment, or facilities.

2.4.3 With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this LGIA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.

**2.5 Disconnection.** Upon termination of this LGIA, Interconnection Service shall terminate and, the Parties will take all appropriate steps to disconnect the Large Generating Facility from the Interconnecting Transmission Owner's Interconnection Facilities. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from a non-terminating Party's Default of this LGIA or such non-terminating Party otherwise is responsible for these costs under this LGIA.

**2.6 Survival.** This LGIA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this LGIA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this LGIA was in effect; and to permit each Party to have access to the lands of the other Party(ies) pursuant to this LGIA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **ARTICLE 3. REGULATORY FILINGS**

- 3.1 Filing.** The System Operator and Interconnecting Transmission Owner shall jointly file this LGIA (and any amendment hereto) with the appropriate Governmental Authority, if required, in accordance with Section 11.3 of the LGIP. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the Interconnection Customer has executed this LGIA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the System Operator and Interconnecting Transmission Owner with respect to such filing and to provide any information reasonably requested by the System Operator and/or the Interconnecting Transmission Owner needed to comply with applicable regulatory requirements.

#### **ARTICLE 4. SCOPE OF SERVICE**

- 4.1 Interconnection Product Options.** Interconnection Customer has selected the following (checked) type(s) of Interconnection Service:

Check: ☐ NR for NR Interconnection Service (NR Capability Only)

☐ CNR for CNR Interconnection Service (CNR Capability and NR Capability)

- 4.1.1 Capacity Network Resource Interconnection Service (CNR Interconnection Service).**

**4.1.1.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and the Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which all other Capacity Network Resources are interconnected under the CC Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Large Generating Facility to be designated as a Capacity Network Resource, to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the net CNR



Capability, or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as all other existing Capacity Network Resources, and to be studied as a Capacity Network Resource on the assumption that such a designation will occur.

#### **4.1.2 Network Resource Interconnection Service (NR Interconnection Service).**

**4.1.2.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Large Generating Facility in a manner comparable to that in which all other Network Resources are interconnected under the NC Interconnection Standard. NR Interconnection Service allows the Interconnection Customer's Large Generating Facility to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the gross and net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff. Notwithstanding the above, the portion of a Large Generating Facility that has been designated as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, unless pursuant to a new Interconnection Request for CNR Interconnection Service.

**4.2 Provision of Service.** System Operator and Interconnecting Transmission Owner shall provide Interconnection Service for the Large Generating Facility at the Point of Interconnection.

**4.3 Performance Standards.** Each Party shall perform all of its obligations under this LGIA in accordance with Applicable Laws and Regulations, the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such requirements and standards, such Party shall not be deemed to be in Breach of this LGIA for its compliance therewith. If such Party is the Interconnecting Transmission Owner, then that Party shall amend the LGIA and System Operator, in conjunction with the Interconnecting Transmission Owner, shall submit the amendment to the Commission for approval.

**4.4 No Transmission Delivery Service.** The execution of this LGIA does not constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service, or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

**4.5 Transmission Delivery Service Implications.** CNR Interconnection Service and NR Interconnection Service allow the Interconnection Customer's Large Generating Facility to be designated by any Network Customer under the Tariff on the New England Transmission System as a Capacity Network Resource or Network Resource, up to the net CNR Capability or NR Capability, respectively, on the same basis as all other existing Capacity Network Resources and Network Resources interconnected to the New England Transmission System, and to be studied as a Capacity Network Resource or a Network Resource on the assumption that such a designation will occur. Although CNR Interconnection Service and NR Interconnection Service do not convey a reservation of transmission service, any Network Customer can utilize its network service under the Tariff to obtain delivery of capability from the Interconnection Customer's Large Generating Facility in the same manner as it accesses Capacity Network Resources and Network Resources. A Large Generating Facility receiving CNR Interconnection Service or NR Interconnection Service may also be used to provide Ancillary Services, in accordance with the Tariff and Market Rule 1, after technical studies and/or periodic analyses are performed with respect to the Large Generating Facility's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Capacity Network Resource or Network Resource. However, if an Interconnection Customer's Large Generating Facility has not been designated as a Capacity Network Resource or as a Network Resource by any load, it cannot be required to provide Ancillary Services except to the extent such requirements extend to all Generating Facilities that are similarly situated.

CNR Interconnection Service and NR Interconnection Service do not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its

Large Generating Facility to any particular load on the New England Transmission System without incurring congestion costs. In the event of transmission constraints on the New England Transmission System, the Interconnection Customer's Large Generating Facility shall be subject to the applicable congestion management procedures for the New England Transmission System in the same manner as other Capacity Network Resources or Network Resources.

There is no requirement either at the time of study or interconnection, or at any point in the future, that the Interconnection Customer's Large Generating Facility be designated as a Capacity Network Resource or as a Network Resource by a Network Service Customer under the Tariff or that the Interconnection Customer identify a specific buyer (or sink). To the extent a Network Customer does designate the Large Generating Facility as either a Capacity Network Resource or a Network Resource, it must do so pursuant to the Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining CNR Interconnection Service or NR Interconnection Service, as long as the Large Generating Facility has not been deemed to be retired, any future transmission service request for delivery from the Large Generating Facility on the New England Transmission System of any amount of capacity capability and/or energy capability will not require that any additional studies be performed or that any further upgrades associated with such Large Generating Facility be undertaken, regardless of whether or not such Large Generating Facility is ever designated by a Network Customer as a Capacity Network Resource or Network Resource, and regardless of changes in ownership of the Large Generating Facility. To the extent the Interconnection Customer enters into an arrangement for long-term transmission service for deliveries from the Large Generating Facility outside the New England Transmission System, or if the unit has been deemed to be retired, such request may require additional studies and upgrades in order for Interconnecting Transmission Owner to grant such request.

**4.6 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this LGIA are set forth in Article 9.6 and Article 13.4. Interconnection Customer shall be paid for such services in accordance with Article 11.6.



**ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING,  
PROCUREMENT, AND CONSTRUCTION**

**5.1 Options.** Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall specify the In-Service Date, Initial Synchronization Date, and Commercial Operation Date as specified in the Interconnection Request or as subsequently revised pursuant to Section 4.4 of the LGIP; and select either the Standard Option or Alternate Option set forth below, and such dates and selected option shall be set forth in Appendix B (Milestones). At the same time, Interconnection Customer shall indicate whether it elects to exercise the Option to Build set forth in Article 5.1.3 below. If the dates designated by Interconnection Customer are not acceptable to Interconnecting Transmission Owner, Interconnecting Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days. Upon receipt of the notification that Interconnection Customer's designated dates are not acceptable to Interconnecting Transmission Owner, the Interconnection Customer shall notify Interconnecting Transmission Owner within thirty (30) Calendar Days whether it elects to exercise the Option to Build if it has not already elected to exercise the Option to Build. In accordance with Section 8 of the LGIP and unless otherwise mutually agreed, the Alternate Option is not an available option if the Interconnection Customer waived the Interconnection Facilities Study.

**5.1.1 Standard Option.** The Interconnecting Transmission Owner shall design, procure, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B (Milestones). The Interconnecting Transmission Owner shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Interconnecting Transmission Owner reasonably expects that it will not be able to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the specified dates, the Interconnecting Transmission Owner shall promptly provide written notice to the Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by Interconnection Customer are acceptable to Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities by the designated dates.

If Interconnecting Transmission Owner subsequently fails to complete Interconnecting Transmission Owner's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Initial Synchronization Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B (Milestones); Interconnecting Transmission Owner shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each day that the applicable System Operator refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of new Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2. The System Operator, Interconnecting Transmission Owner, and Interconnection Customer must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to the LGIA. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** If the dates designated by Interconnection Customer are not acceptable to Interconnecting Transmission Owner, the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives, or the procurement and construction of all facilities other than the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build under Article 5.1.3). If the Parties are unable to reach agreement on such

terms and conditions, then, pursuant to Article 5.1.1 (Standard Option), Interconnecting Transmission Owner shall assume responsibility for the design, procurement and construction of all facilities other than the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades if the Interconnection Customer elects to exercise the Option to Build.

**5.2 General Conditions Applicable to Option to Build.** If Interconnection Customer assumes responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades,

(1) the Interconnection Customer shall commit in the LGIA to a schedule for the completion of, and provide the System Operator evidence of proceeding with: (a) engineering and design of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades, (b) procurement of necessary equipment and ordering of long lead time material, and (c) construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(2) the Interconnection Customer shall engineer, procure equipment, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Interconnecting Transmission Owner;

(3) Interconnection Customer's engineering, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Interconnecting Transmission Owner would be subject in the engineering, procurement or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(4) Interconnecting Transmission Owner shall review and approve the engineering design, equipment acceptance tests, and the construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

- (5) prior to commencement of construction, Interconnection Customer shall provide to Interconnecting Transmission Owner any changes to the schedule for construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades reflected in Appendix B (Milestones), and shall promptly respond to requests for information from Interconnecting Transmission Owner;
- (6) at any time during construction, Interconnecting Transmission Owner shall have the right to gain unrestricted access to the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;
- (7) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Interconnecting Transmission Owner, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (8) the Interconnection Customer shall indemnify the Interconnecting Transmission Owner for claims arising from the Interconnection Customer's construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 (Indemnity);
- (9) the Interconnection Customer shall transfer control of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the Interconnecting Transmission Owner prior to the In-Service Date;
- (10) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner prior to the In-Service Date;
- (11) Interconnecting Transmission Owner shall approve and accept for operation and maintenance the Interconnecting Transmission Owner's Interconnection Facilities and Stand



Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2;

(12) Interconnection Customer shall deliver to Interconnecting Transmission Owner “as built” drawings, information, and any other documents that are reasonably required by Interconnecting Transmission Owner to assure that the Interconnection Facilities and Stand Alone Network Upgrades are built to the standards and specifications required by Interconnecting Transmission Owner; and

(13) Interconnection Customer shall pay Interconnecting Transmission Owner the agreed upon amount of [\$ PLACEHOLDER] for Interconnecting Transmission Owner to execute responsibilities enumerated to Interconnecting Transmission Owner under this Article 5.2. Interconnecting Transmission Owner shall invoice Interconnection Customer for this total amount to be divided on a monthly basis pursuant to Article 12.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Interconnecting Transmission Owner’s Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Interconnecting Transmission Owner pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer’s fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Interconnecting Transmission Owner to the Interconnection Customer in the event that Interconnecting Transmission Owner does not complete any portion of the Interconnecting Transmission Owner’s Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to ½ of 1 percent per day of the actual cost of the Interconnecting Transmission Owner’s Interconnection Facilities and Network Upgrades, in the aggregate, for which Interconnecting Transmission Owner has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Interconnecting Transmission Owner’s Interconnection Facilities and Network Upgrades for which the Interconnecting Transmission Owner has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Interconnecting Transmission Owner

to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this LGIA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Interconnecting Transmission Owner's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to take the delivery of power for the Large Generating Facility's Trial Operation or to export power from the Large Generating Facility on the specified dates, unless the Interconnection Customer would have been able to commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to take the delivery of power for Large Generating Facility's Trial Operation or to export power from the Large Generating Facility, but for Interconnecting Transmission Owner's delay; (2) the Interconnecting Transmission Owner's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other Interconnection Customer who has entered into an LGIA with the Interconnecting Transmission Owner or any cause beyond Interconnecting Transmission Owner's reasonable control or reasonable ability to cure, including, but not limited to, actions by the System Operator that cause delays and/or delays in licensing, permitting or consents where the Interconnecting Transmission Owner has pursued such licenses, permits or consents in good faith; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

- 5.4 Power System Stabilizers.** If a Power System Stabilizer is required to be installed on the Large Generating Facility for the purpose of maintaining system stability, the Interconnection Customer shall procure, install, maintain and operate Power System Stabilizers in accordance with the guidelines and procedures established by the System Operator and Interconnecting Transmission Owner, and consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator and Interconnecting Transmission Owner reserve the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers, subject to the design and operating limitations of the Large Generating

Facility. If the Large Generating Facility's Power System Stabilizers are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the System Operator and Interconnecting Transmission Owner, or their designated representative. The requirements of this paragraph shall not apply to non-synchronous power production equipment.

**5.5 Equipment Procurement.** If responsibility for construction of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades is to be borne by the Interconnecting Transmission Owner, then the Interconnecting Transmission Owner shall commence design of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades and procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The Interconnecting Transmission Owner has completed the Facilities Study pursuant to the Facilities Study Agreement;

**5.5.2** The Interconnecting Transmission Owner has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B (Milestones); and

**5.5.3** The Interconnection Customer has provided security to the Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).

**5.6 Construction Commencement.** The Interconnecting Transmission Owner shall commence construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

- 5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades;
- 5.6.3** The Interconnecting Transmission Owner has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B (Milestones); and
- 5.6.4** The Interconnection Customer has provided security to Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).
- 5.7 Work Progress.** The Interconnection Customer and the Interconnecting Transmission Owner shall keep each Party informed, by written quarterly progress reports, as to the progress of their respective design, procurement and construction efforts in order to meet the dates specified in Appendix B (Milestones). Any Party may also, at any other time, request a written progress report from the other Parties. If, at any time, the Interconnection Customer determines that the completion of the Interconnecting Transmission Owner's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer, upon the System Operator's approval that the change in the In-Service Date will not constitute a Material Modification pursuant to Section 4.4 of the LGIP, will provide written notice to the Interconnecting Transmission Owner of such later date upon which the completion of the Interconnecting Transmission Owner's Interconnection Facilities will be required.
- 5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with the New England Transmission System, and shall work diligently and in good faith to make any necessary design changes.
- 5.9 Other Interconnection Options.**
- 5.9.1 Limited Operation.** If any of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the

Commercial Operation Date of the Large Generating Facility, System Operator and the Interconnecting Transmission Owner shall, upon the request and at the expense of Interconnection Customer, perform operating studies on a timely basis to determine the extent to which the Large Generating Facility and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this LGIA. System Operator and Interconnecting Transmission Owner shall permit Interconnection Customer to operate the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**5.9.2 Provisional Interconnection Service.** Upon the request of Interconnection Customer, and prior to completion of requisite Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities, System Operator and the Interconnecting Transmission Owner may execute a Provisional Large Generator Interconnection Agreement or Interconnection Customer may request the filing of an unexecuted Provisional Large Generator Interconnection Agreement with the Interconnection Customer for Provisional Interconnection Service at the discretion of System Operator and Interconnecting Transmission Owner based upon an evaluation that will consider the results of available studies. System Operator and Interconnecting Transmission Owner shall determine, through available studies or additional studies as necessary, whether stability, short circuit, thermal, and/or voltage issues would arise if Interconnection Customer interconnects without modifications to the Large Generating Facility or the New England Transmission System. System Operator and Interconnecting Transmission Owner shall determine whether any Interconnection Facilities, Network Upgrades, Distribution Upgrades, or System Protection Facilities that are necessary to meet the requirements of NERC, or any applicable Regional Entity for the interconnection of a new, modified and/or expanded Large Generating Facility are in place prior to the commencement of Interconnection Service from the Large Generating Facility. Where available studies indicate that such Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities that are required for the interconnection of a new, modified and/or expanded Large Generating Facility are not currently in place, System Operator will perform a study, at the Interconnection Customer's expense, to confirm the facilities that are required for Provisional Interconnection Service. The maximum permissible output of the Large Generating Facility in the Provisional Large Generator

Interconnection Agreement shall be studied and updated each time the conditions assumed in the studies supporting the Provisional Interconnection Service change. Provisional Interconnection Service is an optional procedure and it will not alter the Interconnection Customer's Queue Position and associated cost and upgrade responsibilities. Interconnection Customer assumes all risk and liabilities with respect to changes between the Provisional Large Generator Interconnection Agreement and the Large Generator Interconnection Agreement, including changes in output limits and Interconnection Facilities, Network Upgrades, Distribution Upgrades, and/or System Protection Facilities cost responsibilities.

**5.10 Interconnection Customer's Interconnection Facilities ("ICIF").** Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.10.1 Large Generating Facility Specifications.** Interconnection Customer shall submit initial specifications for the ICIF, including System Protection Facilities, to Interconnecting Transmission Owner at least one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Initial Synchronization Date. Interconnecting Transmission Owner shall review such specifications to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Interconnecting Transmission Owner's Review.** Interconnecting Transmission Owner's review of Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the Large Generating Facility, or the ICIF. Interconnection Customer shall make such changes to the ICIF as may reasonably be required by Interconnecting Transmission Owner, in accordance with Good Utility Practice, to ensure that the ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner.

**5.10.3 ICIF Construction.** The ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Interconnecting Transmission Owner “as-built” drawings, information and documents for the ICIF, such as: a one-line diagram, a site plan showing the Large Generating Facility and the ICIF, plan and elevation drawings showing the layout of the ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the Interconnection Customer’s step-up transformers, the facilities connecting the Large Generating Facility to the step-up transformers and the ICIF, and the impedances (determined by factory tests) for the associated step-up transformers and the Large Generating Facilities. The Interconnection Customer shall provide Interconnecting Transmission Owner specifications for the excitation system, automatic voltage regulator, Large Generating Facility control and protection settings, transformer tap settings, and communications, if applicable.

**5.11 Interconnecting Transmission Owner’s Interconnection Facilities Construction.** The Interconnecting Transmission Owner’s Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnecting Transmission Owner shall deliver to the Interconnection Customer the following “as-built” drawings, information and documents for the Interconnecting Transmission Owner’s Interconnection Facilities. The appropriate drawings and relay diagrams shall be included in Appendix A of this LGIA. The System Operator will obtain operational control of the Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities pursuant to the TOA.

**5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party (“Granting Party”) shall furnish at the incremental cost to another Party (“Access Party”) any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents if allowed under the applicable agency agreement, that are necessary to enable the Access Party solely to obtain

ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Large Generating Facility with the Administered Transmission System; (ii) operate and maintain the Large Generating Facility, the Interconnection Facilities and the New England Transmission System; and (iii) disconnect or remove the Access Party's facilities and equipment upon termination of this LGIA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

- 5.13 Lands of Other Property Owners.** If any part of the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall at Interconnection Customer's expense use Reasonable Efforts, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property. Notwithstanding the foregoing, the Interconnecting Transmission Owner shall not be obligated to exercise eminent domain authority in a manner inconsistent with Applicable Laws and Regulations or when an Interconnection Customer is authorized under Applicable Laws and Regulations to exercise eminent domain on its own behalf.
- 5.14 Permits.** System Operator, Interconnecting Transmission Owner and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses, and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, Interconnecting Transmission Owner shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Interconnecting Transmission Owner's own, or an Affiliate's generation.
- 5.15 Early Construction of Base Case Facilities.** Interconnection Customer may request Interconnecting Transmission Owner to construct, and Interconnecting Transmission Owner shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date,



all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Administered Transmission System, which are included in the Base Case of the Facilities Study for the Interconnection Customer, and which also are required to be constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date. The Interconnection Customer shall reimburse the Interconnecting Transmission Owner for all costs incurred related to early construction to the extent such costs are not recovered from other Interconnection Customers included in the base case.

- 5.16 Suspension.** Interconnection Customer reserves the right, upon written notice to Interconnecting Transmission Owner and System Operator, to suspend at any time all work by Interconnecting Transmission Owner associated with the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades required under this LGIA with the condition that the New England Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and the System Operator's and Interconnecting Transmission Owner's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Interconnecting Transmission Owner (i) has incurred pursuant to this LGIA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the New England Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Interconnecting Transmission Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Interconnecting Transmission Owner shall obtain Interconnection Customer's authorization to do so. Interconnecting Transmission Owner shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work by Interconnecting Transmission Owner required under this LGIA pursuant to this Article 5.16, and has not requested Interconnecting Transmission Owner to recommence the work required under this LGIA on or before the expiration of three (3) years following commencement of such suspension, this LGIA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Interconnecting Transmission Owner and System Operator, if no effective date is

specified. A suspension under this Article 5.16 does not automatically permit an extension of the In-Service Date, the Initial Synchronization Date or the Commercial Operation Date. A request for extension of such dates is subject to Section 4.4.5 of the LGIP. Notwithstanding the extensions permitted under Section 4.4.5 of the LGIP, the three-year period shall in no way result in an extension of the In-Service Date, the Initial Synchronization Date or the Commercial Operation Date that exceeds seven (7) years from the date of the Interconnection Request; otherwise, this LGIA shall be deemed terminated.

## **5.17 Taxes.**

**5.17.1 Payments Not Taxable.** The Parties intend that all payments or property transfers made by any Party for the installation of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations and Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity generated at the Large Generating Facility will pass to another party prior to the transmission of the electricity on the New England Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Interconnecting Transmission Owner for the Interconnecting Transmission Owner's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Interconnecting Transmission Owner's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Large Generating Facility. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended

to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Interconnecting Transmission Owner's request, Interconnection Customer shall provide Interconnecting Transmission Owner with a report from an independent engineer confirming its representation in clause (iii), above. Interconnecting Transmission Owner represents and covenants that the cost of the Interconnecting Transmission Owner's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon Interconnecting Transmission Owner.** Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Interconnecting Transmission Owner from the cost consequences of any current tax liability imposed against Interconnecting Transmission Owner as the result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this LGIA, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Interconnecting Transmission Owner.

The Interconnecting Transmission Owner shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges Interconnection Customer under this LGIA unless (i) Interconnecting Transmission Owner has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Interconnecting Transmission Owner to report payments or property as income subject to taxation; provided, however, that Interconnecting Transmission Owner may require Interconnection Customer to provide security, in a form reasonably acceptable to Interconnecting Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Interconnecting Transmission Owner for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty

(30) Calendar Days of receiving written notification from Interconnecting Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period, and the applicable statute of limitation, as it may be extended by the Interconnecting Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that Interconnection Customer will pay Interconnecting Transmission Owner, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Interconnecting Transmission Owner ("Current Taxes") on the excess of (a) the gross income realized by Interconnecting Transmission Owner as a result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this LGIA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Interconnecting Transmission Owner to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1). For this purpose, (i) Current Taxes shall be computed based on Interconnecting Transmission Owner composite federal and state tax rates at the time the payments or property transfers are received and Interconnecting Transmission Owner will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Interconnecting Transmission Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Interconnecting Transmission Owner current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} -$

Present Value of Tax Depreciation))/(1-Current Tax Rate). Interconnection Customer's estimated tax liability in the event taxes are imposed shall be stated in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At Interconnection Customer's request and expense, Interconnecting Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Interconnecting Transmission Owner under this LGIA are subject to federal income taxation. Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Interconnecting Transmission Owner and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Interconnecting Transmission Owner shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Interconnecting Transmission Owner shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within ten (10) years from the date on which the relevant Interconnecting Transmission Owner's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenant contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this LGIA terminates and Interconnecting Transmission Owner retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on Interconnecting Transmission Owner, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.

**5.17.7 Contests.** In the event any Governmental Authority determines that Interconnecting Transmission Owner's receipt of payments or property constitutes income that is subject to taxation, Interconnecting Transmission Owner shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Interconnecting Transmission Owner may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Interconnecting Transmission Owner may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Interconnecting Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Interconnecting Transmission Owner shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Interconnecting Transmission Owner may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Interconnecting Transmission Owner, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement without Interconnection Customer's consent or such written advice will relieve

Interconnection Customer from any obligation to indemnify Interconnecting Transmission Owner for the tax at issue in the contest.

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to Interconnecting Transmission Owner which holds that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this LGIA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Interconnecting Transmission Owner in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this LGIA is not taxable to Interconnecting Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Interconnecting Transmission Owner are not subject to federal income tax, or (d) if Interconnecting Transmission Owner receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Interconnecting Transmission Owner pursuant to this LGIA, Interconnecting Transmission Owner shall promptly refund to Interconnection Customer the following:

- (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
- (ii) interest on any amounts paid by Interconnection Customer to Interconnecting Transmission Owner for such taxes which Interconnecting Transmission Owner did not submit to the taxing authority, interest calculated in accordance with the methodology set forth in the Commission's regulations at 18 CFR §35.19a(a)(2)(iii) from the date payment was made by Interconnection Customer to the date Interconnecting Transmission Owner refunds such payment to Interconnection Customer, and

(iii) with respect to any such taxes paid by Interconnecting Transmission Owner, any refund or credit Interconnecting Transmission Owner receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Interconnecting Transmission Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Interconnecting Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Interconnecting Transmission Owner will remit such amount promptly to Interconnection Customer only after and to the extent that Interconnecting Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Interconnecting Transmission Owner's Interconnection Facilities.

The intent of this provision is to leave Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Interconnecting Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Interconnecting Transmission Owner for which Interconnection Customer may be required to reimburse Interconnecting Transmission Owner under the terms of this LGIA. Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, Interconnecting Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Interconnecting Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall be payable by Interconnection Customer to Interconnecting Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of



competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Interconnecting Transmission Owner.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Party's(ies') tax status. Nothing in this LGIA is intended to adversely affect any Interconnecting Transmission Owner's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** Either Interconnection Customer or Interconnecting Transmission Owner may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, the facilities of any Affected Parties, or the New England Transmission System, that Party shall provide to the other Parties and any Affected Party: (i) sufficient information regarding such modification so that the other Party(ies) may evaluate the potential impact of such modification prior to commencement of the work; and (ii) such information as may be required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Large Generating Facility. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party(ies) at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed. Notwithstanding the foregoing, no Party shall be obligated to proceed with a modification that would constitute a Material Modification and therefore require an Interconnection Request under the LGIP, except as provided under and pursuant to the LGIP.

In the case of Large Generating Facility or Interconnection Customer's Interconnection Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Interconnecting Transmission Owner shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this LGIA and Good Utility Practice.

**5.19.3 Modification Costs.** Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Interconnecting Transmission Owner makes to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System to facilitate the interconnection of a third party to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System, or to provide transmission service to a third party under the Tariff, except as provided for under the Tariff or any other applicable tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Large Generating Facility or Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## **ARTICLE 6. TESTING AND INSPECTION**

**6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Interconnecting Transmission Owner shall test Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Large Generating Facility and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation.

Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. Interconnection Customer shall bear the cost of all such testing and modifications. Interconnection Customer shall generate test energy at the Large Generating Facility only if it has arranged for the delivery of such test energy.

- 6.2 Post-Commercial Operation Date Testing and Modifications.** Each Interconnection Customer and Interconnecting Transmission Owner shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, as may be necessary to ensure the continued interconnection of the Large Generating Facility to the Administered Transmission System in a safe and reliable manner. The Interconnection Customer and Interconnecting Transmission Owner each shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's(ies') facilities, at the requesting Party's expense, as may be in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator shall also have the right to require reasonable additional testing of the other Party's (ies') facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 6.3 Right to Observe Testing.** Each Party shall notify the System Operator and other Party(ies) in advance of its performance of tests of its Interconnection Facilities. The other Party(ies) has the right, at its own expense, to observe such testing.
- 6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe the other Party's(ies') tests and/or inspection of any of its System Protection Facilities and other protective equipment, including Power System Stabilizers; (ii) review the settings of the other Party's(ies') System Protection Facilities and other protective equipment; and (iii) review the other Party's(ies') maintenance records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. Each Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to

the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be governed by Article 22.

## ARTICLE 7. METERING

- 7.1 General.** Each Party shall comply with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding metering. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment. Unless the System Operator otherwise agrees, the Interconnection Customer shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and energy being transmitted under this Tariff and to communicate the information to the System Operator. Unless otherwise agreed, such equipment shall remain the property of the Interconnecting Transmission Owner.
- 7.2 Check Meters.** Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check Interconnecting Transmission Owner's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this LGIA, except as provided in Article 7.4 below. The check meters shall be subject at all reasonable times to inspection and examination by Interconnecting Transmission Owner or its designee. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Standards.** Interconnecting Transmission Owner shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards and the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 7.4 Testing of Metering Equipment.** Interconnecting Transmission Owner shall inspect and test all Interconnecting Transmission Owner-owned Metering Equipment upon installation and thereafter as specified in the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnecting Transmission Owner shall give reasonable notice of the time when any inspection or test shall take place, and Interconnection Customer may have representatives present at the test or inspection. If at any time Metering Equipment is found to be inaccurate or defective, it shall be adjusted, repaired or replaced at Interconnection Customer's expense, in order to provide accurate metering. If Metering Equipment fails to register, or if the

measurement made by Metering Equipment during a test varies by more than the values specified within ISO New England Operating Documents, or successor documents, from the measurement made by the standard meter used in the test, the Interconnecting Transmission Owner shall adjust the measurements, in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 7.5 Metering Data.** At Interconnection Customer's expense, metered data shall be telemetered to one or more locations designated by System Operator and Interconnecting Transmission Owner. The hourly integrated metering, established in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, used to transmit Megawatt hour ("MWh") per hour data by electronic means and the Watt-hour meters equipped with kilowatt-hour ("kwh") or MWh registers to be read at month's end shall be the official measurement of the amount of energy delivered from the Large Generating Facility to the Point of Interconnection. Instantaneous metering is required for all Generators in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 8. COMMUNICATIONS**

- 8.1 Interconnection Customer Obligations.** Interconnection Customer shall maintain satisfactory operating communications with the System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 8.2 Remote Terminal Unit.** Prior to the Initial Synchronization Date of the Large Generating Facility, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Interconnection Customer or Interconnecting Transmission Owner at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by System Operator and Interconnecting Transmission Owner through use of a dedicated point-to-point data circuit(s). The communication protocol for the data circuit(s) shall be specified by System Operator and Interconnecting Transmission Owner. All information required by the ISO New England Operating Documents, or successor documents, must be telemetered directly to the location(s) specified by System Operator and Interconnecting Transmission Owner.

Each Party will promptly advise the other Party(ies) if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party(ies). The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

- 8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

## **ARTICLE 9. OPERATIONS**

- 9.1 General.** Each Party shall comply with applicable provisions of ISO New England Operating Documents, Reliability Standards, or successor documents, regarding operations. Each Party shall provide to the other Party(ies) all information that may reasonably be required by the other Party(ies) to comply with Applicable Laws and Regulations and Applicable Reliability Standards.
- 9.2 Control Area Notification.** Before Initial Synchronization Date, the Interconnection Customer shall notify the System Operator and Interconnecting Transmission Owner in writing in accordance with ISO New England Operating Documents, Reliability Standards, or successor documents. If the Interconnection Customer elects to have the Large Generating Facility dispatched and operated from a remote Control Area other than the Control Area in which the Large Generating Facility is physically located, and if permitted to do so by the relevant transmission tariffs and ISO New England Operating Documents, Reliability Standards, or successor documents, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this LGIA, and remote Control Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed and implemented prior to the placement of the Large Generating Facility in the other Control Area for dispatch and operations.
- 9.3 Interconnecting Transmission Owner and System Operator Obligations.** Interconnecting Transmission Owner and System Operator shall cause the Interconnecting Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this LGIA and ISO New England Operating Documents, Reliability

Standards, or successor documents. Interconnecting Transmission Owner or System Operator may provide operating instructions to Interconnection Customer consistent with this LGIA, ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Interconnecting Transmission Owner's and System Operator's operating protocols and procedures as they may change from time to time. Interconnecting Transmission Owner and System Operator will consider changes to their operating protocols and procedures proposed by Interconnection Customer.

**9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Large Generating Facility and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this LGIA and ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.5 Start-Up and Synchronization.** The Interconnection Customer is responsible for the proper start-up and synchronization of the Large Generating Facility to the New England Transmission System in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6 Reactive Power and Primary Frequency Response.**

**9.6.1 Power Factor Design Criteria.**

**9.6.1.1 Synchronous Generation.** Interconnection Customer shall design the Large Generating Facility and all generating units comprising the Large Generating Facility, as applicable, to maintain a composite power delivery at continuous rated power output at the Point of Interconnection with dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, unless the System Operator or Interconnecting Transmission Owner has established different requirements that apply to all synchronous (and non-wind non-synchronous generators as specified in Appendix G, Section A.ii.4 to the LGIA) generators in the Control Area on a comparable basis and in accordance with ISO



New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6.1.2 Non-Synchronous Generation.** The power factor design criteria requirements applicable to non-synchronous Generating Facilities shall be as specified in in Appendix G to the LGIA. The Low Voltage Ride-Through Capability requirements applicable to wind and inverter-based Generating Facilities shall be as specified in Appendix G to the LGIA.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has synchronized the Large Generating Facility to the New England Transmission System, Interconnection Customer shall operate the Large Generating Facility at the direction of System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding voltage schedules in accordance with such requirements.

**9.6.2.1 Voltage Regulators.** The Interconnection Customer must keep and maintain a voltage regulator on all generating units comprising a Large Generating Facility in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. All Interconnection Customers that have, or are required to have, automatic voltage regulation shall normally operate the Large Generating Facility with its voltage regulators in automatic operation.

It is the responsibility of the Interconnection Customer to maintain the voltage regulator in good operating condition and promptly report to the System Operator and Interconnecting Transmission Owner any problems that could cause interference with its proper operation.

**9.6.2.2 System Protection.** The Interconnection Customer shall install and maintain protection systems in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

### **9.6.3 Payment for Reactive Power.**

Interconnection Customers shall be compensated for Reactive Power service in accordance with Schedule 2 of the Section II of the Tariff.

### **9.6.4 Primary Frequency Response.**

Interconnection Customer with an Interconnection System Impact Study that commenced on or after May 15, 2018 shall ensure the primary frequency response capability of its Large Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Large Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Large Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Large Generating Facility’s real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Large Generating Facility’s real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify System Operator and Interconnecting Transmission Owner that the primary frequency response capability of the Large Generating Facility has been tested and

confirmed during commissioning. Once Interconnection Customer has synchronized the Large Generating Facility with the New England Transmission System, Interconnection Customer shall operate the Large Generating Facility consistent with the provisions specified in Articles 9.6.4.1 and 9.6.4.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Large Generating Facilities.

**9.6.4.1 Governor or Equivalent Controls.** Whenever the Large Generating Facility is operated in parallel with the New England Transmission System, Interconnection Customer shall operate the Large Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with System Operator and Interconnecting Transmission Owner, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to System Operator and Interconnecting Transmission Owner upon request. If Interconnection Customer needs to operate the Large Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify System Operator and Interconnecting Transmission Owner, and provide both with the following information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Large Generating Facility's governor or equivalent controls to a minimum whenever the Large Generating Facility is operated in parallel with the New England Transmission System.

**9.6.4.2 Timely and Sustained Response.** Interconnection Customer shall ensure that the Large Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Large Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Large Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

**9.6.4.3 Exemptions.** Large Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Articles 9.6.4, 9.6.4.1, and 9.6.4.2 of this Agreement. Large Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Article 9.6.4, but shall be otherwise exempt from the operating requirements in Articles 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.4 of this Agreement.

**9.6.4.4 Electric Storage Resources.** Interconnection Customer interconnecting a Large Generating Facility that is an electric storage resource shall establish an operating range in Appendix C of its LGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set

forth in Articles 9.6.4, 9.6.4.1, 9.6.4.2, and 9.6.4.3 of this Agreement. Appendix C shall specify whether the operating range is static or dynamic, and shall consider (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by System Operator, Interconnecting Transmission Owner and Interconnection Customer. If the operating range is dynamic, then Appendix C must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Article 9.6.4.2 of this Agreement when it is online and dispatched to inject electricity to the New England Transmission System and/or receive electricity from the New England Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the New England Transmission System and/or dispatched to receive electricity from the New England Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

## **9.7 Outages and Interruptions.**

### **9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** The System Operator shall have the authority to coordinate facility outages in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Each Party may in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, in coordination with the other Party(ies), remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's(ies') facilities as necessary to perform maintenance or testing or to install or replace equipment, subject to the oversight of System Operator in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.1.2 Outage Schedules.** Outage scheduling, and any related compensation, shall be in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.2 Interruption of Service.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, the System Operator or Interconnecting Transmission Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect System Operator's or Interconnecting Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the New England Transmission System.

**9.7.3 Under-Frequency and Over Frequency Conditions.** Interconnection Customer shall implement under-frequency and over-frequency relay set points for the Large Generating Facility as required by the applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Large Generating Facility response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with System Operator and Interconnecting Transmission Owner in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

#### **9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnecting Transmission Owner shall install at Interconnection Customer's expense, in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, any System Protection Facilities that may be required on the Interconnecting Transmission Owner Interconnection Facilities or the New England Transmission System as a result of the interconnection of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** Each Party's protection facilities shall be designed and coordinated with other systems in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.3** Each Party shall be responsible for protection of its facilities consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.4** Each Party's protective relay design shall allow for tests required in Article 6.

**9.7.4.5** Each Party will test, operate and maintain System Protection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.5 Requirements for Protection.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and compliance with Good Utility Practice , Interconnection Customer shall provide, install, own, and

maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Large Generating Facility to any short circuit occurring on the New England Transmission System not otherwise isolated by Interconnecting Transmission Owner's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the New England Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Large Generating Facility and the New England Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties. Interconnection Customer shall be responsible for protection of the Large Generating Facility and Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. Interconnection Customer shall be solely responsible to disconnect the Large Generating Facility and Interconnection Customer's other equipment if conditions on the New England Transmission System could adversely affect the Large Generating Facility.

**9.7.6 Power Quality.** A Party's facilities shall not cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard.

**9.8 Switching and Tagging Rules.** Each Party shall provide the other Party(ies) with a copy of its switching and tagging rules that are applicable to the other Party's activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Large



Generating Facility to the Administered Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more third parties to use the Interconnecting Transmission Owner's Interconnection Facilities, or any part thereof, Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to the Commission for resolution.

**9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Large Generating Facility or the New England Transmission System by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 10. MAINTENANCE**

**10.1 Interconnecting Transmission Owner and Customer Obligations.** Interconnecting Transmission Owner and Interconnection Customer shall each maintain that portion of its respective facilities that are part of the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities in a safe and reliable manner

and in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 10.2 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of Interconnecting Transmission Owner's Interconnection Facilities, Stand Alone Network Upgrades, Network Upgrades and Distribution Upgrades.

## **ARTICLE 11. PERFORMANCE OBLIGATION**

- 11.1 Interconnection Customer's Interconnection Facilities.** Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at its sole expense.
- 11.2 Interconnecting Transmission Owner's Interconnection Facilities.** Interconnecting Transmission Owner shall design, procure, construct, install, own and/or control the Interconnecting Transmission Owner's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at the sole expense of the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.** Interconnecting Transmission Owner shall design, procure, construct, install, and own the Network Upgrades, and to the extent provided by Article 5.1, Stand Alone Network Upgrades, and Distribution Upgrades described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades). The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Interconnecting Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by the Interconnection Customer.

## **11.4 Cost Allocation; Compensation; Rights; Affected Systems**

**11.4.1 Cost Allocation.** Cost allocation of Generator Interconnection Related Upgrades shall be in accordance with Schedule 11 of Section II of the Tariff.

**11.4.2 Compensation.** Any compensation due to the Interconnection Customer for increases in transfer capability to the PTF resulting from its Generator Interconnection Related Upgrade shall be determined in accordance with Sections II and III of the Tariff.

**11.4.3 Rights.** Notwithstanding any other provision of this LGIA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades.

**11.4.4 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into separate related facilities agreements to address any upgrades to the Affected System(s) that are necessary for safe and reliable interconnection of the Interconnection Customer's Generating Facility.

**11.5 Provision of Security.** At least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of an Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Interconnecting Transmission Owner a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Interconnecting Transmission Owner in accordance with Section 7 of Schedule 11 of the Tariff. In addition:

**11.5.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Interconnecting Transmission Owner, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

**11.5.2** The letter of credit must be issued by a financial institution reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.5.3** The surety bond must be issued by an insurer reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.6 Interconnection Customer Compensation.** If System Operator or Interconnecting Transmission Owner requests or directs Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power), or 13.4.1 of this LGIA, Interconnection Customer shall be compensated pursuant to the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.** Interconnection Customer shall be compensated for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the New England Transmission System during an Emergency Condition in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 12. INVOICE**

**12.1 General.** Each Party shall submit to the other Party(ies), on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party(ies) under this LGIA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**12.2 Final Invoice.** Within six months after completion of the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, Interconnecting Transmission Owner shall provide an invoice of the final cost of the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades and

shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates.

Interconnecting Transmission Owner shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice. Interconnection Customer shall pay to Interconnecting Transmission Owner any amount by which the actual payment by Interconnection Customer for estimated costs falls short of the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

**12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by any Party will not constitute a waiver of any rights or claims the other Party(ies) may have under this LGIA.

**12.4 Disputes.** In the event of a billing dispute between Interconnecting Transmission Owner and Interconnection Customer, Interconnecting Transmission Owner shall continue to provide Interconnection Service under this LGIA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Interconnecting Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet these two requirements for continuation of service, then Interconnecting Transmission Owner may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accord with the methodology set forth in the Commission's Regulations at 18 CFR § 35.19a(a)(2)(iii).

## **ARTICLE 13. EMERGENCIES**

**13.1 Obligations.** Each Party shall comply with the Emergency Condition procedures of the System Operator in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**13.2 Notice.** Interconnecting Transmission Owner or System Operator as applicable shall notify Interconnection Customer and System Operator or Interconnecting Transmission Owner as applicable, promptly when it becomes aware of an Emergency Condition that affects the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Interconnecting Transmission Owner and System Operator promptly when it becomes aware of an Emergency Condition that affects the Large Generating Facility or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of Interconnection Customer's or Interconnecting Transmission Owner's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.

**13.3 Immediate Action.** Unless, in Interconnection Customer's reasonable judgment, immediate action is required, Interconnection Customer shall obtain the consent of Interconnecting Transmission Owner and System Operator, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Large Generating Facility or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by the Interconnecting Transmission Owner or the System Operator or otherwise regarding the New England Transmission System.

**13.4 System Operator's and Interconnecting Transmission Owner's Authority.**

**13.4.1 General.** System Operator or Interconnecting Transmission Owner may take whatever actions or inactions with regard to the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities it deems necessary

during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the New England Transmission System or Interconnecting Transmission Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Large Generating Facility or the Interconnection Customer's Interconnection Facilities. System Operator and Interconnecting Transmission Owner may, on the basis of technical considerations, require the Large Generating Facility to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Large Generating Facility; implementing a reduction or disconnection pursuant to Article 13.4.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Large Generating Facility and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of System Operator's and Interconnecting Transmission Owner's operating instructions concerning Large Generating Facility real power and reactive power output within the manufacturer's design limitations of the Large Generating Facility's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.4.2 Reduction and Disconnection.** System Operator and Interconnecting Transmission Owner may reduce Interconnection Service or disconnect the Large Generating Facility or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. These rights are separate and distinct from any right of curtailment of the System Operator and Interconnecting Transmission Owner pursuant to the Tariff. When the System Operator and Interconnecting Transmission Owner can schedule the reduction or disconnection in advance, System Operator and Interconnecting Transmission Owner shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction

or disconnection. System Operator and Interconnecting Transmission Owner shall coordinate with the Interconnection Customer in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the System Operator and Interconnecting Transmission Owner. Any reduction or disconnection shall continue only for so long as reasonably necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The Parties shall cooperate with each other to restore the Large Generating Facility, the Interconnection Facilities, and the New England Transmission System to their normal operating state as soon as practicable in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**13.5 Interconnection Customer Authority.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents and the LGIA and the LGIP, the Interconnection Customer may take whatever actions or inactions with regard to the Large Generating Facility or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Large Generating Facility or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities. System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.6 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this LGIA, a Party shall not be liable to another Party for any action it takes in responding to an Emergency Condition so long as such action is made in good faith and in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**



**14.1 Regulatory Requirements.** Each Party's obligations under this LGIA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this LGIA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended. To the extent that a condition arises that could result in Interconnection Customer's inability to obtain, or its loss of, status or exemption under the Federal Power Act, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, the Parties shall engage in good faith negotiations to address the condition so that such result will not occur and so that this LGIA can be performed.

**14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this LGIA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This LGIA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

**ARTICLE 15. NOTICES**

**15.1 General.** Unless otherwise provided in this LGIA, any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered

mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F (Addresses for Delivery of Notices and Billings).

A Party may change the notice information in this LGIA by giving five (5) Business Days written notice prior to the effective date of the change.

**15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.

**15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.

**15.4 Operations and Maintenance Notice.** Each Party shall notify the other Party(ies) in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **ARTICLE 16. FORCE MAJEURE**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** A Party shall not be considered to be in Default with respect to any obligation hereunder (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party(ies) in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall

exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **ARTICLE 17. DEFAULT**

### **17.1 Default.**

**17.1.1 General.** No Breach shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this LGIA or the result of an act or omission of the other Party(ies). Upon a Breach, the non-Breaching Party shall give written notice of such Breach to the breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the non-Breaching Party(ies) shall have the right to terminate this LGIA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not those Parties terminate this LGIA, to recover from the Breaching Party all amounts due hereunder, plus all other damages and remedies to which they are entitled at law or in equity. The provisions of this Article will survive termination of this LGIA.

## **ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

Notwithstanding any other provision of this Agreement, the liability, indemnification and insurance provisions of the Transmission Operating Agreement (“TOA”) or other applicable

operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner and the liability, indemnification and insurance provisions of the Tariff apply to the relationship between the System Operator and the Interconnection Customer and between the Interconnecting Transmission Owner and the Interconnection Customer.

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and save the other Party(ies) harmless from any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's(ies') action or inactions of their obligations under this LGIA on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by an indemnified Party.

**18.1.1 Indemnified Person.** If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Person may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, the amount owing to the Indemnified Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

The Indemnified Person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the Indemnifying Party, in which event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be reasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Other than the Liquidated Damages heretofore described, in no event shall a Party be liable under any provision of this LGIA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** The Interconnecting Transmission Owner and the Interconnection Customer shall, at their own expense, maintain in force throughout the period of this LGIA, and until released by the other Party(ies), the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death, and property damage.

**18.3.3** Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.

**18.3.4** Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.

**18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party(ies), its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall

contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this LGIA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.

- 18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after termination of this LGIA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.
- 18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this LGIA.
- 18.3.9** Within ten (10) days following execution of this LGIA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this LGIA, executed by each insurer or by an authorized representative of each insurer.
- 18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program, provided that such Party's senior secured debt is rated at

investment grade, or better, by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article, it shall notify the other Party(ies) that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this LGIA.

## **ARTICLE 19. ASSIGNMENT**

**19.1 Assignment.** This LGIA may be assigned by any Party only with the written consent of the other Parties; provided that the Parties may assign this LGIA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this LGIA; and provided further that the Interconnection Customer shall have the right to assign this LGIA, without the consent of the Interconnecting Transmission Owner or System Operator, for collateral security purposes to aid in providing financing for the Large Generating Facility, provided that the Interconnection Customer will promptly notify the Interconnecting Transmission Owner and System Operator of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the Interconnecting Transmission Owner and System Operator of the date and particulars of any such exercise of assignment right(s), including providing the Interconnecting Transmission Owner with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this LGIA shall not relieve a Party of its obligations,



nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **ARTICLE 20. SEVERABILITY**

- 20.1 Severability.** If any provision in this LGIA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this LGIA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Interconnecting Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **ARTICLE 21. COMPARABILITY**

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **ARTICLE 22. CONFIDENTIALITY**

- 22.1 Confidentiality.** Confidential Information shall include, without limitation, all information governed by the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another prior to the execution of this LGIA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by a Party, the other Party(ies) shall provide, in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**22.1.1 Term.** During the term of this LGIA, and for a period of three (3) years after the expiration or termination of this LGIA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

**22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this LGIA; or (6) is required, in accordance with Article 22.1.7 of the LGIA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this LGIA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party(ies) that it no longer is confidential.

**22.1.3 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or are considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with this LGIA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with

such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under this LGIA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Governmental Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of this LGIA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this LGIA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party(ies), use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party(ies)) or return to the other Party(ies), without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party(ies).

**22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Parties shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR. section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this LGIA, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) to this LGIA prior to the release of the Confidential Information to the Commission or its staff. The Party

shall notify the other Party(ies) to the LGIA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this LGIA (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this LGIA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Parties’ Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

**23.1** Each Party shall notify the other Party(ies), first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Large Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party(ies). The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the

notice no later than twenty-four (24) hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party(ies) copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **ARTICLE 24. INFORMATION REQUIREMENTS**

- 24.1 Information Acquisition.** Subject to any applicable confidentiality restrictions, including, but not limited to, codes of conduct, each Party shall submit specific information regarding the electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.
- 24.2 Information Submission by System Operator and Interconnecting Transmission Owner.** The initial information submission by System Operator and Interconnecting Transmission Owner shall occur no later than one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date and shall include information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise mutually agreed to by the Parties. On a monthly basis Interconnecting Transmission Owner shall provide Interconnection Customer a status report on the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.
- 24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Initial Synchronization Date. Interconnection Customer shall submit a completed copy of the Large Generating Facility data requirements contained in Appendix 1 to the LGIP. It shall also include any additional information provided to Interconnecting Transmission Owner and System Operator for the Interconnection Feasibility Study, Interconnection System Impact Study and Interconnection Facilities Study. Information in this submission shall be the most current Large Generating Facility design or expected performance data. Information submitted for stability models shall be

compatible with Interconnecting Transmission Owner and System Operator standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is different from what was originally provided to Interconnecting Transmission Owner pursuant to the Interconnection Study Agreement between Interconnecting Transmission Owner and Interconnection Customer, then the System Operator will review it and conduct appropriate studies, as needed, at the Interconnection Customer's cost, to determine the impact on the New England Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

**24.4 Information Supplementation.** Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all "as-built" Large Generating Facility information and "as-tested" performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Large Generating Facility as required by Good Utility Practice such as an open circuit "step voltage" test on the Large Generating Facility to verify proper operation of the Large Generating Facility's automatic voltage regulator.

Unless otherwise agreed, the test conditions shall include: (1) Large Generating Facility at synchronous speed; (2) automatic voltage regulator on and in voltage control mode; and (3) a five percent change in Large Generating Facility terminal voltage initiated by a change in the voltage regulators reference voltage. Interconnection Customer shall provide validated test recordings showing the responses of Large Generating Facility terminal and field voltages. In the event that direct recordings of these voltages is impractical, recordings of other voltages or currents that mirror the response of the Large Generating Facility's terminal or field voltage are acceptable if information necessary to translate these alternate quantities to actual Large Generating Facility terminal or field voltages is provided. Large Generating Facility testing shall be conducted and results provided to the Interconnecting Transmission Owner for each individual generating unit in a station.

The Interconnection Customer shall provide the Interconnecting Transmission Owner and System Operator with any information changes due to proposed equipment replacement, repair, or adjustment. Interconnecting Transmission Owner shall provide the Interconnection Customer and System Operator with any information changes due to proposed equipment replacement, repair or adjustment in the directly connected substation or any adjacent Interconnecting Transmission Owner-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information in accordance with Article 5.19 of this Agreement.

## **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

- 25.1 Information Access.** Each Party (the “disclosing Party”) shall make available to the other Parties information that is in the possession of the disclosing Party and is necessary in order for the other Party(ies) to: (i) verify the costs incurred by the disclosing Party for which the other Party(ies) are responsible under this LGIA; and (ii) carry out its obligations and responsibilities under this LGIA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this LGIA.
- 25.2 Reporting of Non-Force Majeure Events.** Each Party (the “notifying Party”) shall notify the other Party(ies) when the notifying Party becomes aware of its inability to comply with the provisions of this LGIA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory Breach of this LGIA.
- 25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this LGIA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the other Party(ies), to audit at its own expense the other Party's(ies') accounts and records pertaining to a Party's performance or a Party's satisfaction of obligations under this LGIA. Such audit rights shall include audits of the other Party's(ies') costs, calculation of invoiced amounts, the efforts to allocate responsibility for the provision of reactive support to the New England



Transmission System, the efforts to allocate responsibility for interruption or reduction of generation on the New England Transmission System, and each Party's actions in an Emergency Condition. Any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party's performance and satisfaction of obligations under this LGIA. Each Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

#### **25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four (24) months following Interconnecting Transmission Owner's issuance of a final invoice in accordance with Article 12.2.

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this LGIA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four (24) months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four (24) months after the event for which the audit is sought.

**25.5 Audit Results.** If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party(ies) together with those records from the audit which support such determination.

### **ARTICLE 26. SUBCONTRACTORS**

**26.1 General.** Nothing in this LGIA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this LGIA; provided,

however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this LGIA in providing such services and each Party shall remain primarily liable to the other Party(ies) for the performance of such subcontractor.

**26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this LGIA. The hiring Party shall be fully responsible to the other Party(ies) for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this LGIA. Any applicable obligation imposed by this LGIA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

**26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **ARTICLE 27. DISPUTES**

**27.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with this LGIA or its performance, such Party (the "disputing Party") shall provide the other Party(ies) with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's(ies') receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this LGIA.

**27.2 External Arbitration Procedures.** Any arbitration initiated under this LGIA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single

arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association (“Arbitration Rules”) and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail

**27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this LGIA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel; or (2) a pro rata share of the cost of a single arbitrator chosen by the Parties.

## **ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS**

**28.1 General.** Each Party makes the following representations, warranties and covenants:

**28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Large Generating Facility, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this LGIA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this LGIA.

**28.1.2 Authority.** Such Party has the right, power and authority to enter into this LGIA, to become a Party hereto and to perform its obligations hereunder. This LGIA is a legal, valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.** The execution, delivery and performance of this LGIA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this LGIA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this LGIA, and it will provide to any Governmental Authority notice of any actions under this LGIA that are required by Applicable Laws and Regulations.

## **ARTICLE 29. [OMITTED]**

## **ARTICLE 30. MISCELLANEOUS**

- 30.1 Binding Effect.** This LGIA and the rights and obligations hereof shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.
- 30.2 Conflicts.** In the event of a conflict between the body of this LGIA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this LGIA shall prevail and be deemed the final intent of the Parties.
- 30.3 Rules of Interpretation.** This LGIA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this LGIA, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this LGIA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this LGIA or such Appendix of this LGIA, or such Section of the LGIP or such Appendix of the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this LGIA as a whole and not to any particular Article or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".
- 30.4 Entire Agreement.** Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, this LGIA, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this LGIA. Except for the ISO New England Operating Documents, Applicable Reliability Standards, any

applicable tariffs, related facilities agreements, or successor documents, there are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this LGIA.

**30.5 No Third Party Beneficiaries.** This LGIA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

**30.6 Waiver.** The failure of a Party to this LGIA to insist, on any occasion, upon strict performance of any provision of this LGIA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by a Party of its rights with respect to this LGIA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this LGIA. Termination or Default of this LGIA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Interconnecting Transmission Owner. Any waiver of this LGIA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this LGIA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this LGIA.

**30.8 Multiple Counterparts.** This LGIA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment.** The Parties may by mutual agreement amend this LGIA by a written instrument duly executed by the Parties.

**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this LGIA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this LGIA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** Consistent with Section 11.3 of the LGIP, Interconnecting Transmission Owner and System Operator shall have the right to make unilateral filings with the Commission to modify this LGIA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this LGIA pursuant to section 206 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Parties and to participate fully in any proceeding before the Commission in which such modifications may be considered. In the event of disagreement on terms and conditions of the LGIA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the Federal Power Act shall apply only to Interconnecting Transmission Owner's position on such terms and conditions. Nothing in this LGIA shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This LGIA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Parties.

**IN WITNESS WHEREOF**, the Parties have executed this LGIA in triplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

**ISO New England Inc. (System Operator)**

By:

Title:

Date:

**[*Insert Name of*] (Interconnecting Transmission Owner)**

By:

Title:

Date:

**[*Insert name of*] (Interconnection Customer)**

By:

Title:

Date:



## **APPENDICES TO LGIA**

Appendix A	Interconnection Facilities, Network Upgrades and Distribution Upgrades
Appendix B	Milestones
Appendix C	Interconnection Details
Appendix D	Security Arrangements Details
Appendix E	Commercial Operation Date
Appendix F	Addresses for Delivery of Notices and Billings
Appendix G	Interconnection Requirements for a Wind Generating Plant

## APPENDIX A TO LGIA

### Interconnection Facilities, Network Upgrades and Distribution Upgrades

#### 1. Interconnection Facilities:

- a. **Point of Interconnection and Point of Change of Ownership.** The Point of Interconnection shall be at the point where *[insert description of location]*. See Appendix A-*[insert]*, which drawing is attached hereto and made part hereof.

The Point of Change of Ownership shall be at the point where *[insert description of location]*. See Appendix A – *[insert]*, which drawing is attached hereto and made part hereof.

If not located at the Point of Interconnection, the metering point(s) shall be located at: *[insert location]*.

- b. **Interconnection Customer's Interconnection Facilities (including metering equipment).** The Interconnection Customer shall construct *[insert Interconnection Customer's Interconnection Facilities]*. See Appendix A-*[insert]*.
- c. **Interconnecting Transmission Owner's Interconnection Facilities (including metering equipment).** The Interconnecting Transmission Owner shall construct *[insert Interconnecting Transmission Owner's Interconnection Facilities, including any Cluster Enabling Transmission Upgrades]*. See Appendix –*[insert]*.

#### 2. Network Upgrades:

- a. **Stand Alone Network Upgrades.** *[insert Stand Alone Network Upgrades]*.
- b. **Other Network Upgrades.** *[insert Other Network Upgrades, including any Cluster Enabling Transmission Upgrades]*.

3. **Distribution Upgrades.** *[insert Distribution Upgrades]*
4. **Affected System Upgrades.** *[insert Affected System Upgrades]*
5. **Long Lead Facility-Related Upgrades.**

The Interconnection Customer's Large Generating Facility is associated with a Long Lead Facility, in accordance with Section 3.2.3 of the LGIP. Pursuant to Section 4.1 of the LGIP, the Interconnection Customer shall be responsible for the following upgrades in the event that the Long Lead Facility achieves Commercial Operation and obtains a Capacity Supply Obligation in accordance with Section III.13.1 of the Tariff:

*[insert list of upgrades]*

If the Interconnection Customer fails to cause these upgrades to be in-service prior to the commencement of the Long Lead Facility's Capacity Commitment Period, the Interconnection Customer shall be deemed to be in Breach of this LGIA in accordance with Article 17.1, and the System Operator will initiate all necessary steps to terminate this LGIA, in accordance with Article 2.3.

6. **Contingent Facilities:** *[insert list of Contingent Facilities]*
7. **Post-Forward Capacity Auction Re-study Upgrade Obligations.** *[insert any change in upgrade obligations that result from re-study conducted post receiving a Capacity Supply Obligation through a Forward Capacity Auction.]*



## APPENDIX B TO LGIA

### Milestones

- 1. Selected Option Pursuant to Article 5.1:** Interconnection Customer selects the *[insert]*. Options as described in Articles 5.1.*[insert]*, 5.1.*[insert]*, and 5.1.*[insert]* ] shall not apply to this LGIA.
- 2. Milestones and Other Requirements for all Large Generating Facilities:** The description and entries listed in the following table establish the required Milestones in accordance with the provisions of the LGIP and this LGIA. The referenced section of the LGIP or article of the LGIA should be reviewed by each Party to understand the requirements of each milestone.

Item No.	Milestone Description	Responsible Party	Date	LGIP/LGIA Reference
1	Provide evidence of continued Site Control to System Operator, or \$250,000 non-refundable deposit to Interconnecting Transmission Owner	Interconnection Customer	Within 15 BD of final LGIA receipt	§ 11.3.1.1 of LGIP
2	Provide evidence of one or more milestones specified in § 11.3 of LGIP	Interconnection Customer	Within 15 BD of final LGIA receipt	§ 11.3.1.2 of LGIP
3	Commit to a schedule for payment of upgrades	Interconnection Customer	Within 15 BD of final LGIA receipt	§ 11.3.1.2 of LGIP
4	Provide either (1) evidence of Major Permits or (2) refundable deposit to Interconnecting Transmission Owner	Interconnection Customer	If (1) Within 15 BD of final LGIA receipt or if (2) At time of LGIA execution	§ 11.3.1.2 of LGIP
5	Provide certificate of insurance	Interconnection Customer and Interconnecting	Within 10 Calendar Days of execution of LGIA	§ 18.3.9 of LGIA

		Transmission Owner		
6	Provide siting approval for Generating Facility and Interconnection Facilities to Interconnecting Transmission Owner	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of LGIP
7A	Receive Governmental Authority approval for any facilities requiring regulatory approval	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.1 of LGIA
7B	Obtain necessary real property rights and rights-of-way for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.2 of LGIA
7C	Provide to Interconnecting Transmission Owner written authorization to proceed with design, equipment procurement and construction	Interconnection Customer	As may be agreed to by the Parties	§ 5.5.2 and § 5.6.3 of LGIA
7D	Provide System Operator evidence of proceeding with design, equipment procurement, and construction	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
7E	Provide quarterly written progress reports	Interconnection Customer and	15 Calendar Days after the end of	§ 5.7 of LGIA

		Interconnecting Transmission Owner	each quarter beginning the quarter that includes the date for Milestone 7C and ending when the entire Large Generating Facility and all required Interconnection Facilities and Network Upgrades are in place	
8	Provision of Security to Interconnecting Transmission Owner pursuant to Section 11.5 of LGIA	Interconnection Customer	At least 30 Calendar Days prior to design, procurement and construction	§§ 5.5.3 and 5.6.4 of LGIA
9	Provision of Security Associated with Tax Liability to Interconnecting Transmission Owner pursuant to Section 5.17.3 of LGIA	Interconnection Customer	As may be agreed to by the Parties	§ 5.17.3 of LGIA
10A	Commit to the ordering of long lead time material for Interconnection Facilities and Network Upgrades	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of LGIP
10B	Commit to ordering of long lead time material for Interconnecting Transmission Owner's	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA

	Interconnection Facilities and Stand Alone Network Upgrades to be constructed by Interconnection Customer			
11A	Provide initial design, engineering and specification for Interconnection Customer's Interconnection Facilities to Interconnecting Transmission Owner	Interconnection Customer	180 Calendar Days prior to Initial Synchronization Date	§ 5.10.1 of LGIA § 7.5 of LGIP
11B	Provide comments on initial design, engineering and specification for Interconnection Customer's Interconnection Facilities	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of LGIA § 7.5 of LGIP
11C	Provide to Interconnecting Transmission Owner initial design, engineering and specification for Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 LGIA
11D	Provide to Interconnection Customer comments on initial design, engineering and specification for Interconnecting	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.2 of LGIA



	Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer			
12A	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities to Interconnecting Transmission Owner	Interconnection Customer	90 Calendar Days prior to Initial Synchronization Date	§ 5.10.1 of LGIA § 7.5 of LGIP
12B	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection Facilities	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of LGIA § 7.5 of LGIP
12C	Provide to Interconnecting Transmission Owner final design, engineering and specification for Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
12D	Provide to Interconnection Customer comments on final design, engineering and specification of	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.2 of LGIA

	Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer			
13A	Deliver to Interconnecting Transmission Owner "as built" drawings, information and documents regarding Interconnection Customer's Interconnection Facilities	Interconnection Customer	Within 120 Calendar Days of Commercial Operation date	§ 5.10.3 of LGIA
13B	Deliver to Interconnecting Transmission Owner "as built" drawings, information and documents regarding Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
14	Provide protective relay settings to Interconnecting Transmission Owner for coordination and verification	Interconnection Customer	At least 90 Calendar Days prior to Initial Synchronization Date	§§ 5.10.1 of LGIA
15A	Commencement of construction of Interconnection Facilities	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.6 of LGIA

15B	Commencement of construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
16	Submit updated data "as purchased"	Interconnection Customer	No later than 180 Calendar Days prior to Initial Synchronization Date	§ 24.3 of LGIA
17	In Service Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 343.1 and 4.4.5 of LGIP, § 5.1 of LGIA
18	Initial Synchronization Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.4.1, 4.4.4, 4.4.5, and 7.5 of LGIP
19	Submit supplemental and/or updated data – "as built/as-tested"	Interconnection Customer	Prior to Commercial Operation Date	§ 24.4 of LGIA
20	Commercial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.4.1, 4.4.4, 4.4.5, and 7.5 of LGIP

21A	Deliver to Interconnection Customer “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities	Interconnecting Transmission Owner	If requested, within 120 Calendar Days after Commercial Operation Date	§ 5.11 of LGIA
21B	Deliver to Interconnecting Transmission Owner “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnection Customer	As may be agreed to by the Parties	§ 5.2 of LGIA
21C	Approve and accept for operation and maintenance the Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades to be constructed by the Interconnection Customer	Interconnecting Transmission Owner	As may be agreed to by the Parties	§ 5.2 of LGIA
22	Provide Interconnection Customer final cost invoices	Interconnecting Transmission Owner	Within 6 months of completion of construction of Interconnecting Transmission Owner	§ 12.2 of LGIA

			Interconnection Facilities and Network Upgrades	
23	Transfer control of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner to be constructed by the Interconnection Customer	Interconnection Customer	Prior to In-Service Date	§ 5.2 of LGIA
24	Transfer ownership of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner to be constructed by the Interconnection Customer	Interconnection Customer	Prior to In-Service Date	§ 5.2 of LGIA

### 3. Milestones Applicable Solely for CNR Interconnection Service and Long Lead Facility

**Treatment.** In addition to the Milestones above, the following Milestones apply to Interconnection Customers requesting CNR Interconnection Service and/or Long Lead Facility Treatment:

Item No.	Milestone Description	Responsible Party	Date	LGIP/LGIA Reference
----------	-----------------------	-------------------	------	---------------------

1	If Long Lead Facility, all dates by which Critical Path Schedule upgrades will be submitted to System Operator (end date for New Capacity Show of Interest Submission)	Interconnection Customer		§ 3.2.3 of LGIP
2	If Long Lead Facility, dates by which Long Lead Facility Deposits will be provided to System Operator (each deadline for which New Generating Capacity Resource would be required to provide financial assurance under § III.13.1.9 of the Tariff)	Interconnection Customer		§ 3.2.3 of LGIP
3	If Long Lead Facility, Capacity Commitment Period (not to exceed the Commercial Operation Date)	Interconnection Customer		§ 1 and 3.2 of LGIP
4	Submit necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date, in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of LGIP
5	Participate in a CNR Group Study	Interconnection Customer		§ 3.2.1.3 of LGIP
6	Qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of LGIP
7	Complete a re-study of the applicable Interconnection Study to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request based on the results of the Forward Capacity Auction or Reconfiguration Auction or bilateral	System Operator		§ 3.2.1.3 of LGIP

	transaction through which the Interconnection Customer received a Capacity Supply Obligation			
--	--	--	--	--

## APPENDIX C TO LGIA

### Interconnection Details

#### 1. Description of Interconnection:

Interconnection Customer shall install a [insert] MW facility, rated at [insert]MW gross and [insert] MW net, with all studies performed at or below these outputs. The Generating Facility is comprised of [insert] units in a [insert description of facility type - combined cycle, wind farm, etc.] rated at: [insert] MW each, and will located at [insert location].

The Large Generating Facility shall receive:

Network Resource Interconnection Service for the NR Capability at a level not to exceed [insert gross and net] MW for Summer, and [insert gross and net] MW for Winter.

Capacity Network Resource Interconnection Service for: (i) the NR Capability at a level not to exceed [insert gross and net at or above 50 degrees F] MW for Summer and [insert gross and net at or above 0 degrees F] MW for Winter; and (ii) the CNR Capability at [insert net] MW for Summer and [insert net] MW for Winter, which shall not exceed [insert the maximum net MW electrical output of the Generating Facility at an ambient temperature at or above 90 degrees F for summer and at or above 20 degrees F for winter.]

#### 2. Detailed Description of Generating Facility and Generator Step-Up Transformer, if applicable:

Generator Data	
Number of Generators	
Manufacturer	
Model	
Designation of Generator(s)	
Excitation System Manufacturer	
Excitation System Model	



Voltage Regulator Manufacturer	
Voltage Regulator Model	
<b>Generator Ratings</b>	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 90 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 50 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 20 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above zero Degrees F	
Station Service Load For Each Unit	
Overexcited Reactive Power at Rated MVA and Rated Power Factor	
Underexcited Reactive Power at Rated MVA and Rated Power Factor	
<b>Generator Short Circuit and Stability Data</b>	
Generator MVA rating	
Generator AC Resistance	
Subtransient Reactance (saturated)	
Subtransient Reactance (unsaturated)	
Transient Reactance (saturated)	
Negative sequence reactance	
<b>Transformer Data</b>	
Number of units	
Self Cooled Rating	
Maximum Rating	

Winding Connection (LV/LV/HV)	
Fixed Taps	
Z1 primary to secondary at self cooled rating	
Z1 primary to tertiary at self cooled rating	
Z1 secondary to tertiary at self cooled rating	
Positive Sequence X/R ratio primary to secondary	
Z0 primary to secondary at self cooled rating	
Z0 primary to tertiary at self cooled rating	
Z0 secondary to tertiary at self cooled rating	
Zero Sequence X/R ratio primary to tertiary	

**3. Other Description of Interconnection Plan and Facilities:**

*[Insert any other description relating to the Generating Facility, including, but not limited to switchyard, protection equipment, step-up transformer to the extent not described in Appendix A.]*

## **APPENDIX D TO LGIA**

### **Security Arrangements Details**

Infrastructure security of the New England Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day New England Transmission System reliability and operational security. The Commission will expect System Operator, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected to the New England Transmission System to comply with the recommendations offered by the Critical Infrastructure Protection Committee and, eventually, best practice recommendations from NERC. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

## **APPENDIX E TO LGIA**

### **Commercial Operation Date**

This Appendix E is a part of the LGIA between System Operator Interconnecting, Transmission Owner and Interconnection Customer.

[Date]

[Interconnecting Transmission Owner; Address]

[to be supplied]

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Re: \_\_\_\_\_ Large Generating Facility

Dear \_\_\_\_\_:

On [Date] [Interconnection Customer] has completed Trial Operation of Unit No. \_\_\_\_\_. This letter confirms that [Interconnection Customer] commenced commercial operation of Unit No. \_\_\_\_\_ at the Large Generating Facility, effective as of [Date plus one day].

Thank you.

[Signature]

[Interconnection Customer Representative]

## **APPENDIX F TO LGIA**

**Addresses for Delivery of Notices and Billings Notices:**

System Operator:

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

**Billings and Payments:**

System Operator:

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road

Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

**Alternative Forms of Delivery of Notices (telephone, facsimile or email):**

System Operator:

Facsimile: (413) 540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

With copy to:

Facsimile: (413) 535-4024

E-mail: [billingdept@iso-ne.com](mailto:billingdept@iso-ne.com)

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

DUNS Numbers:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner: [To be supplied]

## **APPENDIX G TO LGIA**

### **Interconnection Requirements For A Wind and Inverter-Based Generating Facilities**

Appendix G sets forth requirements and provisions specific to wind and inverter-based Generating Facilities. All other requirements of this LGIA continue to apply to wind and inverter-based Generating Facility interconnections.

#### **A. Technical Standards Applicable to Wind and Inverter-Based Generating Facility** **i. Low Voltage Ride-Through (LVRT) Capability**

Wind and inverter-based Generating Facilities shall be able to remain online during voltage disturbances up to the time periods and associated voltage levels set forth in the standard below. The LVRT standard provides for a transition period standard and a post-transition period standard.

##### **Transition Period LVRT Standard**

The transition period standard applies to wind generating plants subject to FERC Order 661 that have either: (i) interconnection agreements signed and filed with the Commission, filed with the Commission in unexecuted form, or filed with the Commission as non-conforming agreements between January 1, 2006 and December 31, 2006, with a scheduled in-service date no later than December 31, 2007, or (ii) wind generating turbines subject to a wind turbine procurement contract executed prior to December 31, 2005, for delivery through 2007.

1. Wind generating plants are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind generating plant substation location, as determined by and documented by the System Operator and Interconnecting Transmission Owner. The maximum clearing time the wind generating plant shall be required to withstand for a three-phase fault shall be 9 cycles at a voltage as low as 0.15 p.u., as measured at the high side of the wind generating plant step-up transformer (i.e., the transformer that steps the voltage up to the transmission interconnection voltage or “GSU”), after which, if the fault remains

following the location-specific normal clearing time for three-phase faults, the wind generating plant may disconnect from the transmission system.

2. This requirement does not apply to faults that would occur between the wind generator terminals and the high side of the GSU or to faults that would result in a voltage lower than 0.15 per unit on the high side of the GSU serving the facility.
3. Wind generating plants may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind generating plants may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator, etc.) within the wind generating plant or by a combination of generator performance and additional equipment.
5. Existing individual wind generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT. Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual wind generator units that are replaced are required to meet the Appendix G LVRT Standard.

#### **Post-transition Period LVRT Standard**

All wind Generating Facilities subject to FERC Order No. 661 and not covered by the transition period described above , as well as inverter-based Generating Facilities must meet the following requirements:

1. Wind and inverter-based Generating Facilities are required to remain in-service during three-phase faults with normal clearing (which is a time period of approximately 4 – 9 cycles) and single line to ground faults with delayed clearing, and subsequent post-fault voltage recovery to prefault voltage unless clearing the fault effectively disconnects the generator from the system. The clearing time requirement for a three-phase fault will be specific to the wind or inverter-based Generating Facility substation location, as determined by and documented by the System Operator and Interconnecting



Transmission Owner. The maximum clearing time the wind or inverter-based Generating Facility shall be required to withstand for a three-phase fault shall be 9 cycles after which, if the fault remains following the location-specific normal clearing time for three-phase faults, the wind or inverter-based Generating Facility may disconnect from the transmission system. Wind and inverter-based Generating Facilities shall remain interconnected during such a fault on the transmission system for a voltage level as low as zero volts, as measured at the high voltage side of the wind or inverter-based Generating Facility GSU.

2. This requirement does not apply to faults that would occur between the wind or inverter-based Generating Facility terminals and the high side of the GSU.
3. Wind and inverter-based Generating Facilities may be tripped after the fault period if this action is intended as part of a special protection system.
4. Wind and inverter-based Generating Facilities may meet the LVRT requirements of this standard by the performance of the generators or by installing additional equipment (e.g., Static VAr Compensator) within the wind or inverter-based Generating Facility or by a combination of generator performance and additional equipment.
5. Existing individual wind generator units that are, or have been, interconnected to the network at the same location at the effective date of the Appendix G LVRT Standard are exempt from meeting the Appendix G LVRT Standard for the remaining life of the existing generation equipment. Existing individual wind generator units that are replaced are required to meet the Appendix G LVRT Standard.

**ii. Power Factor Design Criteria (Reactive Power)**

**SECTION 1.** A newly interconnecting non-synchronous Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commences after October 5, 2016 shall maintain dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, at continuous rated power output, measured at the high-side of the station transformer or at the Point of the Interconnection if there is no station transformer. This power factor range standard shall be dynamic and

can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors (provided the use of such capacitors is solely for the purpose of offsetting collector system losses and is found to meet all of the requirements specified in the Interconnection System Impact Study), or a combination of the two.

**SECTION 2.** A wind Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commenced after April 17, 2016 but before October 5, 2016 shall maintain dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, at continuous rated power output, measured at the high-side of the station transformer or at the Point of Interconnection if there is no station transformer.

**SECTION 3.** A wind Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commenced before April 17, 2016 shall maintain a power factor within the range of 0.95 leading to 0.95 lagging, measured at the Point of Interconnection as defined in this LGIA, if the Interconnection System Impact Study shows that such a requirement is necessary to ensure safety or reliability. For a wind Generating Facility for which the Interconnection System Impact Study commences before April 17, 2016, the power factor range standard can be met by using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors if agreed to by the System Operator and Interconnecting Transmission Owner, or a combination of the two.

**SECTION 4.** A non-wind non-synchronous Generating Facility, and any subsequent modifications thereto, for which the Interconnection System Impact Study commenced before October 5, 2016 shall meet the power factor requirements of Article 9.6.1.1 of the LGIA.

**SECTION 5.** The Interconnection Customer shall not disable power factor equipment while the wind Generating Facility is in operation.

**SECTION 6.** Wind Generating Facilities shall also be able to provide sufficient additional dynamic voltage support in lieu of the power system stabilizer and automatic voltage regulation at the generator excitation system if the Interconnection System Impact Study shows this to be required for system safety or reliability.

**iii. Supervisory Control and Data Acquisition (SCADA) Capability**

Wind and inverter-based Generating Facilities shall provide SCADA capability to transmit data and receive instructions from the System Operator and Local Control Center to protect system reliability. The System Operator, Interconnecting Transmission Owner and the wind or inverter-based Generating Facility Interconnection Customer shall determine what SCADA information is essential for the proposed wind or inverter-based Generating Facility, taking into account the size of the plant and its characteristics, location, and importance in maintaining generation resource adequacy and transmission system reliability in its area.

## **APPENDIX 7**

### **INTERCONNECTION PROCEDURES FOR WIND GENERATION**

Appendix 7 sets forth procedures specific to a wind generating plant. All other requirements of this LGIP continue to apply to wind generating plant interconnections.

#### **A. Special Procedures Applicable to Wind Generating Plants**

The wind generating plant Interconnection Customer, in completing the Interconnection Request required by Section 3.4 of this LGIP, may provide to the System Operator a set of preliminary electrical design specifications depicting the wind generating plant as a single equivalent generator. Upon satisfying these and other applicable Interconnection Request conditions, the wind generating plant may enter the queue and receive the base case data as provided for in this LGIP.

No later than six months after submitting an Interconnection Request completed in this manner, the wind generating plant Interconnection Customer must submit completed detailed electrical design specifications and other data (including collector system layout data) needed to allow the System Operator to complete the Interconnection System Impact Study.

**SCHEDULE 23**

**SMALL GENERATOR  
INTERCONNECTION PROCEDURES**

## **TABLE OF CONTENTS**

### **Section 1. Application**

- 1.1 Applicability
- 1.2 Pre-Application
- 1.3 Interconnection Request
- 1.4 Site Control
- 1.5 Queue Position
- 1.6 Procedures for Transition
- 1.7 Type of Interconnection Service
- 1.8 Withdrawal

### **Section 2. Fast Track Process**

- 2.1 Applicability
- 2.2 Initial Review
- 2.3 Customer Options Meeting
- 2.4 Supplemental Review

### **Section 3. Study Process**

- 3.1 Applicability
- 3.2 Scoping Meeting
- 3.3 Interconnection Feasibility Study
- 3.4 Interconnection System Impact Study
- 3.5 Interconnection Facilities Study

### **Section 4. Provisions that Apply to All Interconnection Requests**

- 4.1 Reasonable Efforts
- 4.2 Disputes
- 4.3 Interconnection Metering
- 4.4 Commissioning
- 4.5 Confidentiality
- 4.6 Comparability
- 4.7 Record Retention
- 4.8 SGIA
- 4.9 Coordination with Affected Systems
- 4.10 Evaluation of a Small Generating Facility Interconnection Request

Attachment 1 – Glossary of Terms

Attachment 2 – Small Generator Interconnection Request

Attachment 3 – Certification Codes and Standards

Attachment 4 – Certification of Small Generator Equipment Packages

Attachment 5 – 10 kW Inverter Process

Attachment 6 – Interconnection Feasibility Study Agreement

Attachment 7 – Interconnection System Impact Study Agreement

Attachment 8 – Interconnection Facilities Study Agreement

EXHIBIT 1 - Small Generator Interconnection Agreement (SGIA)

## **SECTION 1. APPLICATION**

### **1.1 Applicability**

1.1.1 The Small Generator Interconnection Procedures (“SGIP”) and Small Generator Interconnection Agreement (“SGIA”) shall apply to Interconnection Requests, as defined in Attachment 1, pertaining to Small Generating Facilities, except that the SGIP and SGIA shall not apply to a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility’s owner intent is to sell 100% of the Qualifying Facility’s output to its interconnected electric utility. In the event the SGIP and SGIA do not apply, the Interconnection Customer shall follow the applicable state tariff, rules or procedures regarding generator interconnections.

A request to interconnect a certified inverter-based Small Generating Facility no larger than 10 kilowatts (kW) (solely as a Network Resource) shall be evaluated under the Attachment 5 10 kW Inverter Process. A request to interconnect a Small Generating Facility no larger than 20 megawatts (MW) that does not meet the eligibility requirements of section 2.1, or does not pass the Fast Track Process or the 10 kW Inverter Process, shall be evaluated under the section 3 Study Process.

1.1.2 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of these procedures. To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for the purposes of generator interconnections under this Schedule 23. Capitalized terms in Schedule 23 that are not defined in Attachment 1 or the body of these procedures shall have the meanings specified in Section I.2.2 of the Tariff.

1.1.3 Neither these procedures nor the requirements included hereunder apply to Small Generating Facilities interconnected or approved for interconnection prior to May 9, 2006.

1.1.4 Prior to submitting its Interconnection Request (Attachment 2), the Interconnection Customer may ask the System Operator’s interconnection contact employee or office whether the proposed interconnection is subject to these procedures. The System Operator shall respond within fifteen (15) Business Days.



1.1.5 Infrastructure security of electric system equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Commission expects all ISOs/RTOs, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected with electric systems to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for electric system infrastructure and operational security, including physical, operational, and cyber-security practices.

1.1.6 References in these procedures to interconnection agreement are to the SGIA.

## **1.2 Pre-Application**

1.2.1 The System Operator shall designate an employee or office from which information on the application process and on an Affected System can be obtained through informal requests from the Interconnection Customer presenting a proposed project for a specific site. The names, telephone numbers, and e-mail addresses of the System Operator's contact employees or offices shall be made available on the System Operator's Internet web site. Electric system information provided to the Interconnection Customer should include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the Administered Transmission System, to the extent such provision does not violate confidentiality provisions of prior agreements or critical infrastructure requirements. The System Operator shall comply with reasonable requests for such information.

1.2.2 In addition to the information described in section 1.2.1, which may be provided in response to an informal request, an Interconnection Customer may submit a formal written request form to the System Operator along with a non-refundable fee of \$500 for a pre-application report on a proposed project at a specific site. Within two (2) Business Days of receiving the pre-application report request form, the System Operator shall provide a copy of the pre-application request form to the Interconnecting Transmission Owner. The System Operator in conjunction with the Interconnecting Transmission Owner shall provide the pre-application data described in section 1.2.3 to the Interconnection Customer within twenty (20) Business Days of receipt of the completed request form and payment of the \$500 fee. The pre-application report produced by the System Operator in conjunction with the Interconnecting Transmission Owner is non-binding, does not confer any rights, and the Interconnection Customer must still successfully apply to interconnect to the Administered Transmission System. The written pre-

application report request form shall include the information in sections 1.2.2.1 through 1.2.2.8 below to clearly and sufficiently identify the location of the proposed Point of Interconnection.

1.2.2.1 Project contact information, including name, address, phone number, and email address.

1.2.2.2 Project location (street address with nearby cross streets and town)

1.2.2.3 Meter number, pole number, or other equivalent information identifying proposed Point of Interconnection, if available.

1.2.2.4 Generator Type (e.g., solar, wind, combined heat and power, etc.)

1.2.2.5 Size (alternating current kW)

1.2.2.6 Single or three phase generator configuration

1.2.2.7 Stand-alone generator (no onsite load, not including station service – Yes or No?)

1.2.2.8 Is new service requested? Yes or No? If there is existing service, include the customer account number, site minimum and maximum current or proposed electric loads in kW (if available) and specify if the load is expected to change.

1.2.3 Using the information provided in the pre-application report request form in section 1.2.2., the System Operator in conjunction with the Interconnecting Transmission Owner will identify the substation/area bus, bank or circuit likely to serve the proposed Point of Interconnection. The selection by the System Operator in conjunction with the Interconnecting Transmission Owner does not necessarily indicate, after application of the screens and/or study, that this would be the circuit the project ultimately connects to. The Interconnection Customer must request additional pre-application reports if information about multiple Points of Interconnection is requested. If the pre-application report request form seeks information about a Point of Interconnection that is on a distribution facility, the Interconnection Customer shall follow the applicable state tariff, rules or procedures regarding generator interconnections. Subject to section 1.2.4, the pre-application report will include the following information:

1.2.3.1 Total capacity (in MW) of substation/area bus, bank or circuit based on normal or operating ratings likely to serve the proposed Point of Interconnection.

1.2.3.2 Existing aggregate generation capacity (in MW) interconnected to a substation/area bus, bank or circuit (i.e., amount of generation online) likely to serve the proposed Point of Interconnection.

1.2.3.3 Aggregate queued generation capacity (in MW) for a substation/area bus, bank or circuit (i.e., amount of generation in the queue) likely to serve the proposed Point of Interconnection.

1.2.3.4 Available capacity (in MW) of substation/area bus or bank and circuit likely to serve the proposed Point of Interconnection (i.e., total capacity less the sum of existing aggregate generation capacity and aggregate queued generation capacity).

1.2.3.5 Substation nominal distribution voltage and/or transmission nominal voltage if applicable.

1.2.3.6 Nominal distribution circuit voltage at the proposed Point of Interconnection.

1.2.3.7 Approximate circuit distance between the proposed Point of Interconnection and the substation.

1.2.3.8 Relevant line section(s) actual or estimated peak load and minimum load data, including daytime minimum load as described in section 2.4.4.1.1 below and absolute minimum load, when available.

1.2.3.9 Number and rating of protective devices and number and type (standard, bi-directional) of voltage regulating devices between the proposed Point of Interconnection and the substation/area.

Identify whether the substation has a load tap changer.

1.2.3.10 Number of phases available at the proposed Point of Interconnection. If a single phase, distance from the three-phase circuit.

1.2.3.11 Limiting conductor ratings from the proposed Point of Interconnection to the distribution substation.

1.2.3.12 Whether the Point of Interconnection is located on a spot network, grid network, or radial supply.

1.2.3.13 Based on the proposed Point of Interconnection, existing or known constraints such as, but not limited to, electrical dependencies at that location, short circuit interrupting capacity issues, power quality or stability issues on the circuit, capacity constraints, or secondary networks.

1.2.4 The pre-application report need only include existing data. A pre-application report request does not obligate the System Operator or the Interconnecting Transmission Owner to conduct a study or other analysis of the proposed generator in the event that data is not readily available. If the System Operator in conjunction with the Interconnecting Transmission Owner cannot complete all or some of a pre-application report due to lack of available data, the System Operator in conjunction with the Interconnecting Transmission Owner shall provide the Interconnection Customer with a pre-application report that includes the data that is available. The provision of information on “available capacity” pursuant to section 1.2.3.4 does not imply that an interconnection up to this level may be completed without impacts since there are many variables studied as part of the interconnection review process, and data provided in the pre-application report may become outdated at the time of the submission of the complete Interconnection Request. Notwithstanding any of the provisions of this section, the System Operator in conjunction with the Interconnecting Transmission Owner shall, in good faith, include data in the pre-application report that represents the best available information at the time of reporting.

### **1.3 Interconnection Request**

#### **1.3.1 Initiating an Interconnection Request**

To initiate and establish a valid Interconnection Request, the Interconnection Customer shall submit all of the following to the System Operator in the manner specified in the Interconnection Request contained in Attachment 2 to this SGIP: (i) the processing fee or deposit specified in the Interconnection Request, (ii) a completed Interconnection Request in the form of Attachment 2, and (iii) documentation of Site Control in the form specified in Section 1.4 of this SGIP.

The Interconnection Customer must submit a separate Interconnection Request for each site. The Interconnection Customer must comply with the requirements specified in this Section 1.3.1 for each Interconnection Request even when more than one request is submitted for a single site.

#### **1.3.2 Acknowledgement of Interconnection Request**

The System Operator shall acknowledge receipt of the Interconnection Request within three (3) Business Days of receipt of the request and attach a copy of the Interconnection Request to the acknowledgement.

Within three (3) Business Days of receiving the Interconnection Request, the System Operator shall provide a copy of the Interconnection Request to the Interconnecting Transmission Owner.

#### **1.3.3 Deficiencies in Interconnection Request**

An Interconnection Request will not be considered a valid request until all items in Section 1.3.1 have been received by the System Operator. If an Interconnection Request fails to meet the requirements set forth in Section 1.3.1, the System Operator shall notify the Interconnection Customer within ten (10) Business Days of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide the System Operator the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Section 1.3.3 shall be treated in accordance with Section 1.8.

1.3.4 All fees or deposits that must be submitted to the System Operator under this SGIP, must be delivered to the System Operator's bank account by electronic transfer within the period specified in the respective provision. A deposit will not be considered received until it is in the System Operator's bank account.

### **1.4 Site Control**

Documentation of site control must be submitted with the Interconnection Request. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. Site control may be demonstrated through:

1.4.1 Ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing the Small Generating Facility;

1.4.2 An option to purchase or acquire an easement, a license or a leasehold interest in the site for such purpose; or

1.4.3 An exclusivity or other business relationship between the Interconnection Customer and the entity having the right to sell, lease, or grant the Interconnection Customer the right to possess or occupy a site for such purpose; or

1.4.4 Filed applications for required permits to site on federal or state property.

## **1.5 Queue Position**

1.5.1 **General.** The System Operator shall assign a Queue Position based upon the date- and time-stamp of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of information on the application form in Attachment 2 to this SGIP, and Interconnection Customer provides such information in accordance with Section 1.3.3, then the System Operator shall assign Interconnection Customer a Queue Position based on the date the application form was originally submitted.

Except as otherwise provided in this Section 1.5, the Queue Position of each Interconnection Request will be used to determine: (i) the order of performing the Interconnection Studies; (ii) the order in which Interconnection Requests will be included in the CSIS and CFAC; (iii) the order in which Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service will be included in the CNR Group Study; and (iv) the cost responsibility for the Interconnection Facilities and upgrades necessary to accommodate the Interconnection Request. The System Operator shall maintain a single queue. At the

System Operator's option, Interconnection Requests may be studied serially or in clusters for the purpose of the Interconnection System Impact Study.

A CSIS and CFAC shall include the Interconnection Requests that were identified as eligible to participate in the CSIS and CFAC and met the associated requirements for inclusion in said studies in accordance with Section 1.5.3 of this SGIP. An Interconnection Request included in a cluster shall consider a higher queued Interconnection Request not included in the cluster. A lower queued Interconnection Request that is not included in the cluster shall consider all of the higher queued Interconnection Requests that are part of the cluster.

**1.5.2 Order of Interconnection Requests in the CNR Group Study.** Participation in a CNR Group Study shall be a prerequisite to achieve CNR Interconnection Service and CNI Interconnection Service. The CNR Group Study (to be conducted in accordance with Section III.13.1.1.2.3 of the Tariff) shall include all Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service that have an associated New Capacity Show of Interest Form that was submitted during the New Capacity Show of Interest Submission Window for the purpose of qualification for participation in the same Forward Capacity Auction for a Capacity Commitment Period, in accordance with Section III.13.1.1.2 of the Tariff, as well as Long Lead Facilities in accordance with Section 3.2.3 of Schedule 22 of Section II of the Tariff. Where a CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a lower Queue Position is associated with a New Capacity Show of Interest Form that was submitted for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and another CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a higher Queue Position is not associated with a New Capacity Show of Interest Form that was submitted for qualification until a subsequent Forward Capacity Auction, the CNR Interconnection Service or CNI Interconnection Service Interconnection Request with the lower Queue Position will be included in the CNR Group Study prior to the CNR Interconnection Service or the CNI Interconnection Service Interconnection Request with the higher Queue Position.

However, where an Interconnection Customer with a CNR Interconnection Service Interconnection Request submits a New Capacity Show of Interest Form for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and identifies in that New Capacity Show of Interest Form one or more Elective Transmission Upgrade Interconnection Request(s) for an Internal ETU that is not already included in the network model pursuant to Section III.12 of the Tariff for the particular Forward Capacity Auction, the CNR Interconnection Request will be included in the CNR

Group Study at the lowest of the CNR Interconnection Request's or its associated Elective Transmission Upgrade Interconnection Request(s) for the Internal ETU's Queue Position. Where multiple Interconnection Customers' CNR Interconnection Service Interconnection Requests are associated with the same lower Queue Position for an Elective Transmission Upgrade Interconnection Request for an Internal ETU in the CNR Group Study, the CNR Interconnection Request's Queue Position will be used as the tie breaker to dictate the relative order in which the CNR Interconnection Service Interconnection Request will be included in the CNR Group Study.

An Interconnection Customer with a Generating Facility or that is associated with an Import Capacity Resource in the case of an Elective Transmission Upgrade that is treated as a Conditional Qualified New Resource, in accordance with Section III.13.1.1.2.3(f) of the Tariff, may be responsible for the facilities and upgrades associated with an overlapping CNR Interconnection Service or CNI Interconnection Service Interconnection Request having a higher Queue Position if the Conditional Qualified New Resource obtains a Capacity Supply Obligation through a Forward Capacity Auction under Section III.13.2.5 of the Tariff.

An Interconnection Customer with a lower queued CNR Interconnection Service Interconnection Request for a Generating Facility or CNI Interconnection Service Interconnection Request for an Elective Transmission Upgrade that has achieved Commercial Operation and obtained CNR Interconnection Service or CNI Interconnection Service, respectively, may be responsible for additional facilities and upgrades if the related higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively. In such circumstance, Attachment 2 to the SGIA for the lower queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request shall specify the facilities and upgrades for which the Interconnection Customer shall be responsible if the higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively.

Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR

Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates). Interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates that have not yet received the System Operator's approval for their Proposed Plan Applications under Section I.3.9 of the Tariff at the commencement of the CNR Group Study shall be included in the CNR Group Study after all Interconnection Requests submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and all interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff have been included in the CNR Group Study in order of submission to the Interconnecting Transmission Owners or their distribution company affiliates.

### **1.5.3 Clustering.**

Clustering Interconnection Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable Regional System Plan in light of the New England Transmission System's capabilities for the time period under study. The System Operator may study an Interconnection Request serially to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Small Generating Facility.

#### **1.5.3.1 Triggers for Studying Interconnection Requests in Clusters.**

At the discretion of the System Operator, Interconnection Requests will be studied in clusters for the purpose of the Interconnection System Impact Study and the Interconnection Facilities Study when the combination of the following circumstances is present in the interconnection queue: (a) there are two (2) or more Interconnection Requests without completed Interconnection System Impact Studies in the same electrical part of the New England Control Area based on the requested Point of Interconnection, and (b) the System Operator has determined that none of the Interconnection Requests identified in (a) of this Section 1.5.3.1 will be able to interconnect, either individually or on a cluster basis, without the use of common significant new transmission line infrastructure rated at 115 kV AC or HVDC.

#### **1.5.3.2 Notice of Initiation of Cluster Studies.**

When the combination of the triggers specified in Section 1.5.3.1 of this SGIP are present in the interconnection queue, the System Operator will provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests under the Regional System



Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff. The System Operator also will provide notice to the Interconnection Customers with Interconnection Requests identified in Section 1.5.3.1 of this SGIP, and at the time the System Operator notifies the Planning Advisory Committee of the initiation of a cluster, all study work for these Interconnection Requests will be suspended, and they will proceed under Section 1.5.3 of this SGIP. The System Operator will conduct Clustering in two phases. In the first phase, the System Operator will perform a CRPS to identify the CETU and associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests considered in Section 1.5.3.1 of this SGIP, consistent with Section 15.2 of Attachment K. In the second phase, the System Operator will conduct a CSIS and a CFAC to study the Interconnection Requests identified through the CRPS that have elected to participate in the CSIS together with the identified CETU and associated system upgrades, in accordance with this SGIP.

Within sixty (60) Calendar Days of the System Operator's notice to the Planning Advisory Committee of the initiation of the use of Clustering for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff, Interconnection Customers with Interconnection Requests identified in Section 1.5.3.1 shall submit the technical data called for in Attachment 2 (including Attachment A, if applicable) to this SGIP to support the conduct of the CRPS.

#### **1.5.3.3 Cluster Interconnection System Impact Study.**

##### **1.5.3.3.1 Notice of Cluster Interconnection System Impact Study Entry Deadline.**

At the same time the System Operator issues the final CRPS report to the Planning Advisory Committee in accordance with Section 15.4 of Attachment K, the System Operator will provide notice of the entry deadline for the CSIS (the "Cluster Entry Deadline") to the Interconnection Customers with Interconnection Requests identified in the final CRPS report as eligible to participate in the CSIS. The Cluster Entry Deadline shall be thirty (30) Calendar Days from the posting of the final CRPS report.

##### **1.5.3.3.2 Cluster Interconnection System Impact Study Entry Requirements.**

All Interconnection Requests identified in the final CRPS report, by Queue Position as assigned in accordance with Section 1.5.1 of this SGIP, shall be eligible to be studied together in the CSIS.

**1.5.3.3.2.1 Cluster Entry Deadline Election.** By the Cluster Entry Deadline, an Interconnection Customer with an Interconnection Request identified as eligible to be studied in the CSIS must, in writing:

1. withdraw the Interconnection Request, pursuant to Section 1.8;
2. request that the System Operator re-assign the Interconnection Customer's Interconnection Request a new Queue Position at the bottom of the queue as of the Cluster Entry Deadline in relative order with any other Interconnection Requests requesting to be re-queued under this Section 1.5.3.3.2.1; or
3. request to be included in the CSIS and meet the CSIS entry requirements specified in Section 1.5.3.3.2.2.

If, by the Cluster Entry Deadline, Interconnection Customer fails to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or request to be included in the CSIS and meet the CSIS entry requirements, then the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If Interconnection Customer elects option (iii) and does not meet all of the CSIS entry requirements specified in Section 1.5.3.3.2.2 by the Cluster Entry Deadline, the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If an initial Cluster Participation Deposit had been submitted as part of the incomplete CSIS entry requirements submission, the initial Cluster Participation Deposit will be refunded at the time the Interconnection Request is withdrawn.

#### **1.5.3.3.2.2. CSIS Entry Requirements.**

An Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS that elects option (iii) under Section 1.5.3.3.2.1 must meet the following CSIS entry requirements in order to be included in the CSIS:

**(1) Cluster System Impact Study Application.** By the Cluster Entry Deadline, Interconnection Customer must submit to the System Operator, a completed Cluster System Impact Study Application in the form specified in Attachment 2, Attachment A-1 to this SGIP requesting the inclusion of the Interconnection Request in the CSIS;

**(2) System Impact Study Agreement, Study Deposit, Technical Data, and Site Control.** If an Interconnection Feasibility Study Agreement or an Interconnection System Impact Study Agreement has been executed prior to the issuance of the final CRPS report identifying the Interconnection Request as eligible for inclusion in a CSIS, such agreement shall terminate upon execution of a new Interconnection System Impact Study Agreement in accordance with this Section 1.5.3.3.2.2, and any unused balance of

the study deposit associated with the terminated agreement shall be applied toward the study deposit associated with the new Interconnection System Impact Study Agreement.

Within fifteen (15) Business Days following the Cluster Entry Deadline, the System Operator and Interconnecting Transmission Owner will provide to Interconnection Customer an Interconnection System Impact Study Agreement, including a non-binding good faith estimate of the costs and timeframe for commencing and completing the CSIS.

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after receipt along with continued demonstration of Site Control, the technical data called for in Attachment 2 (including Attachment A, if applicable), and a refundable study deposit, to the extent that any additional study deposit is required, in accordance with Section 3.4.2 of this SGIP.

**(3) Cluster Participation Deposit.** By the Cluster Entry Deadline, Interconnection Customer must also submit to the System Operator an initial Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CRPS report. If the System Operator subsequently identifies that an Internal ETU has met the requirements to take the place of a CETU, or portion thereof, pursuant to Section 1.5.3.3.3.4 of this SGIP, the initial Cluster Participation Deposit will be reduced to exclude the costs associated with the CETU, or portion thereof, that is being replaced by the Internal ETU, and the Interconnection Customer shall be refunded the corresponding amount. Cost allocation of the CETU and associated upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The initial Cluster Participation Deposit will be fully refunded (with interest to be calculated in accordance with Section 1.8 of this SGIP) to Interconnection Customer with an Interconnection Request that met the cluster entry requirements: (i) if the cluster is initially undersubscribed by more than ten (10) percent of the quantity of megawatts that the CETU developed through the CRPS was designed to enable and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 1.8, before the CSIS starts, (ii) if the CSIS is initially oversubscribed as described in Section 1.5.3.3.3.2 of this SGIP (e.g., the CETU developed through the CRPS is designed to enable 1,000 MW and more than 1,000 MW

meet the CSIS entry requirements by the Cluster Entry Deadline), in which case the Cluster Participation Deposits will be refunded to Interconnection Customers with Interconnection Requests corresponding to the oversubscribed megawatt quantities, (iii) if the cost estimates for the CETU and the associated system upgrades provided in the final CRPS report for the entire cluster have increased by twenty-five (25) percent or more when compared to the cost estimates provided in the draft CSIS report or the draft CFAC report and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 1.8, within thirty (30) Calendar Days after receipt of the draft CSIS report or the draft CFAC report in accordance with Section 3.4.5 and Section 3.5.4 of this SGIP, respectively, (iv) if less than two (2) Interconnection Requests included in the CSIS remain in the interconnection queue during the CSIS or CFAC, as applicable, in which case, the CSIS or the CFAC terminates and the remaining Interconnection Request proceeds in serial queue order, (v) at the time the Interconnection Customer with an Interconnection Request included in the CSIS provides to the Interconnecting Transmission Owner the deposit specified in Section 4.8 of this SGIP, (vi) if no Interconnection Customer with an Interconnection Request included in the cluster executes an Interconnection Agreement and provides to the Interconnecting Transmission Owner the deposit specified in Section 4.8 of this SGIP, or (vii) if all Interconnection Requests included in the cluster withdraw from the interconnection queue.

Otherwise, the initial Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue at any time after the Cluster Entry Deadline. The non-refundable initial Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **1.5.3.3.3 Cluster Filling, Oversubscription and Backfilling Upon Withdrawal.**

**1.5.3.3.3.1 Cluster Filling.** The CSIS shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area relative to the CETU identified in the final CRPS report that do not yet have a completed Interconnection System Impact Study and met the CSIS entry requirements by the Cluster Entry Deadline up to the approximate megawatt quantity identified in the CRPS as potentially enabled by the CETU. The Interconnection Requests will be included in the CSIS in queue order, based on the Queue Positions assigned in accordance with Section 1.5.1 of this SGIP, relative to other eligible Interconnection Requests.

**1.5.3.3.3.2 Cluster Oversubscription.** If an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to participate in a CSIS met the CSIS entry requirements and therefore would have been eligible for inclusion in the CSIS but is excluded as a result of the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report having been exhausted in queue order under Section 1.5.3.3.3.1, (i) the Cluster Participation Deposit for the CSIS will be refunded to the Interconnection Customer, and (ii) the Interconnection Request will maintain its Queue Position. If there are two (2) or more Interconnection Requests after the CSIS is filled, the System Operator will initiate another cluster to identify the transmission infrastructure to enable the interconnection of another round of Interconnection Requests consistent with Section 15.1 of Attachment K.

**1.5.3.3.3.3 Cluster Backfilling Upon Withdrawal.** Upon withdrawal of an Interconnection Request that is included in the CSIS, the System Operator will backfill the CSIS, in queue order, with later-queued Interconnection Requests consistent with the methodology used to fill the original CSIS as specified in Section 1.5.3.3.3.1 of this SGIP. The System Operator will notify all Interconnection Customers with Interconnection Requests identified by the System Operator as eligible for backfilling that the respective Small Generating Facility (or part thereof) proposed in the Interconnection Request is eligible to participate in the CSIS, and the Interconnection Customer shall have thirty (30) Calendar Days from receipt of System Operator's notice to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or accept the inclusion of the Interconnection Request (or part thereof, in which case the Interconnection Customer shall modify the Interconnection Request to reflect the appropriate reduction) in the CSIS and meet the CSIS entry requirements, consistent with Section 1.5.3.3.2 of this SGIP. If the Interconnection Customer does not make one of these three elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure and consider other later-queued Interconnection Requests.

**1.5.3.3.4 Scope of Cluster Interconnection System Impact Study.** Except as otherwise provided in this Section 1.5.3.3.4, the CSIS shall be conducted in accordance with Sections 3.4.3 and 3.4.4 of this SGIP. The Study Case developed for the CSIS shall also include the CETU and associated system upgrades identified in the final CRPS report. An Internal ETU can be considered, and included in the CSIS, in place of a CETU, or portion thereof, if all of the Interconnection Customers with Interconnection Requests included in the cluster that the ISO has determined need to use the Internal ETU have indicated in the Cluster Application Form or with the executed Interconnection System Impact Study Agreement

that they have a contractual commitment in place providing for the Interconnection Customers to fund and the right to use the Internal ETU. The CSIS shall evaluate the proposed interconnections to the New England Transmission System under the NC Interconnection Standard consistent with Section 1.7.2 of this SGIP and as detailed in the ISO New England Planning Procedures. Consistent with the NC Interconnection Standard, the evaluation will include conditions where the projects proposed in the Interconnection Requests that are included in the CSIS are not dispatched against each other if they do not share a system constraint that would provide the basis for a redispatch condition. The CSIS shall consist of the analysis specified in Section 3.4.3 of this SGIP except for analysis associated with an Interconnection Feasibility Study or a preliminary, non-binding, analysis. An Interconnection Customer with an Interconnection Request being studied as part of the CSIS cannot elect to have the Interconnection Feasibility Study or a preliminary, non-binding, analysis performed as part of the CSIS.

**1.5.3.3.5. Restudy of Cluster Interconnection System Impact Study.** In addition to the circumstances specified in Section 3.4.6 of this SGIP, a re-study of the CSIS is required due to the withdrawal of an Interconnection Request that had been included in the CSIS. Upon withdrawal of an Interconnection Request that had been included in the CSIS, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 1.5.3.3.3. A re-study will be conducted to determine if there are any changes in the upgrades identified during the CSIS with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

**1.5.3.4. Cluster Interconnection Facilities Study.**

Notwithstanding any other provision in this SGIP, an Interconnection Customer with an Interconnection Request included in a completed CSIS will not be eligible to waive the, or request a separate, CFAC. All Interconnection Customers with an Interconnection Request included in a completed CSIS shall be studied together in the CFAC for the purpose of implementing the conclusions of the CSIS with respect to non-sole use facilities.

**1.5.3.4.1 Cluster Interconnection Facilities Study Entry Requirements.**

An Interconnection Customer with an Interconnection Request that was included in a completed CSIS shall execute an Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator, together with the required technical data and refundable deposit for the Interconnection Facilities Study as specified in Section 3.5.1 of this SGIP.

**1.5.3.4.2. Scope of Interconnection Facilities Study.** The CFAC will be conducted in accordance with Sections 3.5.2 and 3.5.3 of this SGIP based on a +/- 20 percent good faith cost estimate.

**1.5.3.4.3 Re-study of the Interconnection Facilities Study.** In addition to the circumstances specified in Section 3.5.5 of this SGIP, a re-study of the CFAC is required due to the withdrawal of an Interconnection Request that had been included in the CFAC. Upon withdrawal of an Interconnection Request included in the CFAC, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 1.5.3.3.3. A re-study of the CSIS and CFAC will be conducted to determine if there are any changes in the upgrades identified during the CSIS and CFAC with the exception of the CETU identified in the final CRPS report, which shall remain consistent with the megawatt quantity(ies) considered in the final CRPS report.

**1.5.3.4.4 Additional Cluster Participation Deposit.** Within thirty (30) Calendar Days after receipt of the final CFAC report in accordance with Section 3.5.3 of this SGIP, an Interconnection Customer with an Interconnection Request included in the CFAC shall submit to the System Operator an additional Cluster Participation Deposit equal to five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CFAC report. Cost allocation of the CETU and associated upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The additional Cluster Participation Deposit provided under this Section 1.5.3.4.4 will be fully refunded (with interest to be calculated in accordance with Section 1.8 of this SGIP) to Interconnection Customer that submitted the additional Cluster Participation Deposit if the conditions specified in Sections 1.5.3.3.2.2(3)(v), (vi), or (vii) above occur.

Otherwise, the additional Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue. The non-refundable additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

**1.5.4 Transferability of Queue Position.** An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Generating Facility identified in the

Interconnection Request and the Point of Interconnection does not change. The Interconnection Customer must notify the System Operator, in writing, of any transfers of Queue Position and must provide the System Operator with the transferee's contact information, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

**1.5.5 Modifications.** Any modification to the Interconnection Request, including the information provided in the attachments, and to the machine data or equipment configuration or to the interconnection site of the Small Generating Facility not agreed to in writing by the System Operator, in consultation with the Interconnecting Transmission Owner, and the Interconnection Customer may be deemed a withdrawal of the Interconnection Request and may require submission of a new Interconnection Request, unless proper notification of each Party by the other and a reasonable time to cure the problems created by the change are undertaken. An Interconnection Customer may decrease the electrical output of a proposed Small Generating Facility after the Cluster Entry Deadline specified in Section 1.5.3.3.1 of this SGIP; however, the requesting Interconnection Customer remains responsible for costs corresponding to the megawatt quantity requested as of the Cluster Entry Deadline. A request to: (1) increase the energy capability or capacity capability output of or add energy storage capability to the Small Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to 1.6.4 of this SGIP shall require a new Interconnection Request for the incremental increase and such Interconnection Request will receive the lowest Queue Position available at that time for the purposes of cost allocation and study analysis; and (2) change from NR Interconnection Service to CNR Interconnection Service, at any time, shall require a new Interconnection Request for CNR Interconnection Service and such Interconnection Request will receive the lowest Queue Position available at that time for the purposes of cost allocation and study analysis.

Notwithstanding the foregoing, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service has until the Forward Capacity Auction for which the associated Capacity Commitment Period begins less than seven (7) years from the date of the original Interconnection Request for CNR Interconnection Service to clear the entire megawatt amount for which the CNR Interconnection Service was requested (or as that amount has been modified in accordance with this Section 1.5.5). A new Interconnection Request for CNR Interconnection Service will be required for the Generating Facility to participate in any subsequent auctions.

## **1.6 Procedures for Transition**



**1.6.1 Queue Position for Pending Requests.** Any Interconnection Customer assigned a Queue Position prior to November 1, 2017 shall retain that Queue Position subject to Section 1.6 of the SGIP.

1.6.1.1 If an Interconnection Study Agreement has not been executed prior to November 1, 2017, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with the version of this SGIP in effect on November 1, 2017 (or as revised thereafter).

1.6.1.2 If an Interconnection Study Agreement has been executed prior to November 1, 2017, such Interconnection Study shall be completed in accordance with the terms of such agreement.

If an Interconnection Study Agreement has been executed prior to November 1, 2017, but the Interconnection Study has not commenced, such Interconnection Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the SGIP in effect on November 1, 2017. Interconnection Studies for Interconnection Requests seeking to interconnect into the Northern and Western Maine parts of the New England Control Area that do not have a completed Interconnection System Impact Study by November 1, 2017 shall be included in the Maine Resource Integration Study, which shall be the first CRPS. The Interconnection Customers identified in the Maine Resource Integration Study as eligible to participate in the associated Cluster System Impact Study shall make one of the elections and complete the associated requirements specified in Section 1.5.3.3.2 of this SGIP within thirty (30) Calendar Days from the later of November 1, 2017 or the final Maine Resource Integration Study report. If the Interconnection Customer does not make one of the elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure.

**1.6.2 Transition Period.** To the extent necessary, the System Operator, Interconnection Customers with an outstanding Interconnection Request (i.e., an Interconnection Request for which an SGIA has neither been executed nor submitted to the Commission for approval prior to November 1, 2017), Interconnecting Transmission Owner and any other Affected Parties, shall transition to proceeding under the version of the SGIP in effect as of November 1, 2017 (or as revised thereafter) within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term “outstanding Interconnection Request” herein shall mean any Interconnection Request, on November 1, 2017: (i) that has been submitted, together with the required deposit and attachments, but not yet accepted by the System Operator; (ii) where the related SGIA has not yet been submitted to the Commission for approval in executed or

unexecuted form, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding Interconnection Request as of the effective date of this SGIP may request a reasonable extension of the next applicable deadline if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension, not to exceed sixty (60) Calendar Days, shall be granted by the System Operator to the extent consistent with the intent and process provided for under this SGIP.

#### **Interconnection Requests for Distribution Facilities Submitted Prior to August 28, 2022**

Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that submitted the Interconnection Request to the System Operator prior to August 28, 2022; and (iii) that have not completed the applicable interconnection process under a state tariff, rules or procedures shall complete the System Operator's interconnection process in Schedule 23 of Section II of the Tariff. Interconnection Customers: (i) with Interconnection Requests for distribution facilities that were subject to the Tariff prior to August 28, 2022; (ii) that had already completed the applicable interconnection process under a state tariff, rules or procedures; and (iii) that subsequently submitted an Interconnection Request to the System Operator prior to August 28, 2022 may either complete the System Operator's interconnection process in Schedule 23 of Section II of the Tariff or withdraw the Interconnection Request submitted to the System Operator.

**1.6.3 One-Time Election for CNR Interconnection Service at Queue Position Assigned Prior to February 1, 2009.** An Interconnection Customer with an outstanding Interconnection Request will be eligible to make a one-time election to be considered for CNR Interconnection Service at the Queue Position assigned prior to February 1, 2009. The Interconnection Customer's one-time election must be made by the end of the New Generating Capacity Show of Interest Submission Window for the fourth Forward Capacity Auction. Interconnection Customers requesting CNR Interconnection Service will be required to comply with the requirements for CNR Interconnection Service set forth in Section 1.7.1. Interconnection Customers requesting CNR Interconnection Service that have not received a completed Interconnection System Impact Study may request a preliminary, non-binding, analysis of potential upgrades that may be necessary for the fourth Forward Capacity Auction – the prompt or near-term auction – pursuant to Sections 3.3.2 or 3.4.3, whichever is applicable.

#### **1.6.4 Grandfathering.**

1.6.4.1 An Interconnection Customer's Generating Facility that is interconnected pursuant to an Interconnection Agreement executed or submitted to the Commission for approval prior to February 1, 2009, will maintain its status as a Network Resource with Network Resource Interconnection Service eligible to participate in the New England Markets, in accordance with the requirements of Market Rule 1, Section III of the Tariff, up to the megawatt amount specified in the Interconnection Agreement, subject to the Interconnection Customer satisfying all requirements set forth in the Interconnection Agreement and this SGIP. If the Generating Facility does not meet the criteria set forth in Section 1.6.4.3 of this SGIP, the Interconnection Customer will be eligible to make a one-time election, pursuant to Section 1.6.3, for Capacity Network Resource treatment without submitting a new Interconnection Request; however, the Interconnection Customer will be required to comply with the requirements for CNR Interconnection Service set forth in Section 1.7.1. Upon completion of the requirements to obtain CNR Interconnection Service, the Interconnection Customer's Interconnection Agreement shall be amended to conform to the SGIA in Exhibit 1 of this SGIP.

1.6.4.2 An Interconnection Customer's Generating Facility governed by an Interconnection Agreement either executed or filed with the Commission in unexecuted form prior to August 1, 2008, shall maintain the Queue Position assigned as of August 1, 2008, and be eligible to participate in the New England Markets, in accordance with the requirements in Market Rule 1, Section III of the Tariff, as in effect as of August 1, 2008, so long as the Interconnection Customer complies with all of the requirements specified in the Interconnection Agreement, including achieving the milestones associated with At-Risk Expenditures, subject to Section 1.5.5 of this SGIP.

1.6.4.3 All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a CNR and obtain CNR Interconnection Service, in accordance with this SGIP, up to the CNR Capability of the resource. The grandfathered CNR Capability for these resources shall be equal to the megawatt amount established pursuant to the following hierarchy:

- (a) First, the megawatt amount specified in an Interconnection Agreement (whether executed or filed in unexecuted form with the Commission).
- (b) Second, in the absence of an Interconnection Agreement with a specified megawatt amount, the megawatt amount specified in an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision).

(c) Third, in the absence of an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) with a specified megawatt amount, as determined by the System Operator based on the documented historic capability of the Generating Facility.

Where a resource has both an Interconnection Agreement and an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision), the lower megawatt amount will govern until the resource completes the applicable process(es) under the Tariff for obtaining the higher megawatt amount. The absence of an Interconnection Agreement or an approval pursuant to Section I.3.9 (or its predecessor provision) specifying a megawatt amount shall be confirmed by an affidavit executed by a corporate officer of the resource attesting that the resource does not have an Interconnection Agreement and/or an approval pursuant to Section I.3.9 of the Tariff (or its predecessor provision) that specifies a megawatt amount.

Where the governing document (as determined by the hierarchy set forth in 1.6.4.3) specifies a megawatt amount at an ambient temperature consistent with the definition of CNR Capability, the grandfathered CNR Capability shall be equal to that amount.

Where the governing document (as determined by the hierarchy set forth in Section 1.6.4.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of CNR Capability.

Where the implementation of this Section 1.6.4.3 results in a CNR Capability that is different than previously had been identified, the revised CNR Capability will be applied commencing with the next Forward Capacity Auction qualification process (after the revised CNR Capability value is identified), which is initiated by the Show of Interest Window in accordance with Section III.13 of the Tariff. The revised CNR Capability will continue to govern until the resource completes the applicable process(es) for obtaining the higher megawatt amount.

1.6.4.4 All resources that are treated as Existing Generating Capacity Resources in the fourth Forward Capacity Auction pursuant to Section III.13 of the Tariff shall receive treatment as a NR and obtain NR Interconnection Services in accordance with this SGIP, up to the NR Capability of the resource. The grandfathered NR Capability shall be determined pursuant to the hierarchy set forth in Section 1.6.4.3.

Where the governing document (as described by the hierarchy set forth in Section 1.6.4.3) of a resource for which a temperature-adjustment curve is used for the claimed capability verification, as set forth in the

ISO New England Manuals, specifies a megawatt amount at an ambient temperature, the grandfathered NR Capability shall be equal to a temperature-adjusted value consistent with the definition of NR Capability.

Where the governing document (as determined by the hierarchy set forth in Section 1.6.4.3) does not specify an ambient temperature, the megawatt amount will be deemed to be at the value consistent with the definition of NR Capability.

## **1.7 Type of Interconnection Services**

At the time the Interconnection Request is submitted, the Interconnection Customer must request either CNR Interconnection Service or NR Interconnection Service, as described in Sections 1.7.1 and 1.7.2 below. An Interconnection Customer that meets the requirements to obtain CNR Interconnection Service shall obtain NR Interconnection Service up to the NR Capability upon completion of all requirements for NR Interconnection Service, including all necessary upgrades. Upon completion of all requirements for the CNR Interconnection Service, the Interconnection Customer shall also receive CNR Interconnection Service for CNR Capability. An Interconnection Customer that meets the requirements to obtain NR Interconnection Service shall receive NR Interconnection Service for the Interconnection Customer's Generating Facility NR Capability.

### **1.7.1 Capacity Network Resource Interconnection Service**

**1.7.1.1 The Product.** The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which CNRs are interconnected under the CC Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Small Generating Facility to be designated as a CNR, and to participate in the New England Markets, in accordance with the Tariff, up to the CNR Capability or as otherwise provided in the Tariff, on the same basis as existing CNRs, and to be studied as a CNR on the assumption that such a designation will occur.

**1.7.1.2 The Studies.** All Interconnection Studies for CNR Interconnection Service shall assure that the Interconnection Customer's Small Generating Facility satisfies the minimum characteristics required to

interconnect in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System. The CNR Group Study for CNR Interconnection Service shall assure that the Interconnection Customer's Small Generating Facility can be interconnected in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other CNRs and Elective Transmission Upgrades with CNI Interconnection Service, in accordance with the CC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The Interconnection Request may also be studied with the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

**1.7.1.3 Milestones for CNR Interconnection Service.** In addition to the requirements set forth in this SGIP, an Interconnection Customer with an Interconnection Request for CNR Interconnection Service shall complete the following milestones prior to receiving CNR Interconnection Service for the CNR Capability, such milestones to be specified in Attachment 4 of the SGIA as either completed or to be completed: (i) submit the necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date (except as modified by Agreement with the System Operator pursuant to Section 1.5.5 of this SGIP), in accordance with the provisions of Section III.13 of the Tariff; (ii) participate in a CNR Group Study for the Forward Capacity Auction associated with the requested Generating Facility's Commercial Operation Date; (iii) qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff; and (iv) complete a re-study of the applicable Interconnection Study and CNR Group Study after the Forward Capacity Auction, Reconfiguration Auction, or bilateral transaction through which the Interconnection Customer received a Capacity Supply Obligation to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request. The re-study shall include those CNR Interconnection Service or CNI Interconnection Service Interconnection Requests with a higher Queue Position that cleared and shall exclude any upgrades that are no longer necessary as a result of existing capacity that will be retired as of the start of the Capacity Commitment Period for which the resource has received a Capacity Supply Obligation. With respect to (iv) above, if an Interconnection Study Agreement has been executed, the Interconnection Study associated with the Interconnection Study Agreement shall include the necessary analysis that would otherwise have been performed in a re-study. If the original Interconnection Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Study Agreement. If an SGIA has been either executed or filed with the Commission in unexecuted form, then the last Interconnection Study completed for the Interconnection

Customer under this SGIP shall be subject to re-study. The Attachments to the SGIA shall be amended (pursuant to Article 12.2 of the SGIA) to reflect CNR Capability and the results of the re-study.

## **1.7.2 Network Resource Interconnection Service**

**1.7.2.1 The Product.** The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which Network Resources are interconnected under the NC Interconnection Standard. NR Interconnection Service allows the Interconnection Customer's Small Generating Facility to participate in the New England Markets in accordance with the provisions of Market Rule 1, Section III of the Tariff, up to the gross and net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as other Network Resources. Notwithstanding the above, the portion of a Small Generating Facility that has been designated solely as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNR Interconnection Service.

**1.7.2.2 The Studies.** The Interconnection Studies for an Network Resource shall assure that the Interconnection Customer's Small Generating Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the unit, in accordance with the NR Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions.

However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnecting Transmission Owner why the study of non-peak load conditions is required for reliability purposes.

1.7.2.3 Milestones for NR Interconnection Service. An Interconnection Customer with an Interconnection Request for NR Interconnection Service shall complete the requirements in this SGIP prior to receiving NR Interconnection Service.

## **1.8 Withdrawal**

1.8.1 The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to System Operator, which System Operator will transmit to the Interconnecting Transmission Owner and any Affected Parties. In addition, if the Interconnection Customer fails to adhere to all requirements of this SGIP, except as provided in Section 4.2 (Disputes), the System Operator shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Except as otherwise provided elsewhere in this SGIP, upon receipt of such written notice, the Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the deficiency or to notify the System Operator of its intent to pursue dispute resolution, and the System Operator shall notify the Interconnecting Transmission Owner and any Affected Parties of the same.

1.8.2 Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during dispute resolution, the System Operator may eliminate the Interconnection Customer's Interconnection Request from the queue until such time that the outcome of dispute resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to System Operator, Interconnecting Transmission Owner, and any Affected Parties all costs prudently incurred with respect to that Interconnection Request prior to the System Operator's receipt of notice described above. The Interconnection Customer must pay all monies due before it is allowed to obtain any interconnection study data or results.

1.8.3 The System Operator shall update the OASIS Queue Position posting. The System Operator and Interconnecting Transmission Owner shall: (i) arrange to refund to the Interconnection Customer any portion of the Interconnection Customer's deposit or study payments that exceeds the costs incurred; or (ii) arrange to charge to the Interconnection Customer any amount of such costs incurred that exceed the Interconnection Customer's deposit or study payments. In the event of such withdrawal, the System Operator, subject to the confidentiality provisions of Section 4.5 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the



disclosure or confidentiality of such information, shall provide, at Interconnection Customer's request, all information developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## SECTION 2. FAST TRACK PROCESS

### 2.1 Applicability

The Fast Track Process is available to an Interconnection Customer proposing to interconnect its Small Generating Facility with the Distribution System that is part of the Administered Transmission System if the Small Generating Facility's capacity does not exceed the size limits identified in the table below. Small Generating Facilities below these limits are eligible for Fast Track review. However, Fast Track eligibility is distinct from the Fast Track Process itself, and eligibility does not imply or indicate that a Small Generating Facility will pass the Fast Track screens in section 2.2.1 below or the Supplemental Review screens in section 2.4.4 below.

Fast Track eligibility is determined based upon the generator type, the size of the generator, voltage of the line and the location of and the type of line at the Point of Interconnection. All Small Generating Facilities connecting to lines greater than or equal to 69 kilovolt (kV) are ineligible for the Fast Track Process regardless of size. All synchronous and induction machines must be no larger than 2 MW to be eligible for the Fast Track Process, regardless of location. For certified inverter-based systems, the size limit varies according to the voltage of the line at the proposed Point of Interconnection. Certified inverter-based Small Generating Facilities located within 2.5 electrical circuit miles of a substation and on a mainline (as defined in the table below) are eligible for the Fast Track Process under the higher thresholds according to the table below. In addition to the size threshold, the Interconnection Customer's proposed Small Generating Facility must meet the codes, standards, and certification requirements of Attachments 3 and 4 of these procedures, or the System Operator in conjunction with the Interconnecting Transmission Owner has to have reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

Fast Track Eligibility for Inverter-Based Systems		
Line Voltage	Fast Track Eligibility Regardless of Location	Fast Track Eligibility on a Mainline <sup>1</sup> and $\leq 2.5$ Electrical Circuit Miles from Substation <sup>2</sup>
$< 5$ kV	$\leq 500$ kW	$\leq 500$ kW
$\geq 5$ kV and $< 15$ kV	$\leq 2$ MW	$\leq 3$ MW

$\geq 15 \text{ kV and } < 30 \text{ kV}$	$\leq 3 \text{ MW}$	$\leq 4 \text{ MW}$
$\geq 30 \text{ kV and } < 69 \text{ kV}$	$\leq 4 \text{ MW}$	$\leq 5 \text{ MW}$

1. For purposes of this table, a mainline is the three-phase backbone of a circuit. It will typically constitute lines with wire sizes of 4/0 American wire gauge, 336.4 kcmil, 397.5 kcmil, 477 kcmil and 795 kcmil.

2. An Interconnection Customer can determine this information about its proposed interconnection location in advance by requesting a pre-application report pursuant to section 1.2.

## 2.2 Initial Review

Within fifteen (15) Business Days after the System Operator notifies the Interconnection Customer it has received a complete Interconnection Request, the System Operator in conjunction with the Interconnecting Transmission Owner shall perform an initial review using the screens set forth below, shall notify the Interconnection Customer of the results, and include with the notification copies of the analysis and data underlying the determinations under the screens.

### 2.2.1 Screens

2.2.1.1 The proposed Small Generating Facility's Point of Interconnection must be on a portion of the Interconnecting Transmission Owner's Distribution System that is subject to the Tariff.

2.2.1.2 For interconnection of a proposed Small Generating Facility to a radial distribution circuit, the aggregated generation, including the proposed Small Generating Facility, on the circuit shall not exceed 15 % of the line section annual peak load as most recently measured at the substation. A line section is that portion of an Interconnecting Transmission Owner's electric system connected to a customer bounded by automatic sectionalizing devices or the end of the distribution line.

2.2.1.3 For interconnection of a proposed Small Generating Facility to the load side of spot network protectors, the proposed Small Generating Facility must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5 % of a spot network's maximum load or 50 kW.

2.2.1.4 The proposed Small Generating Facility, in aggregation with other generation on the distribution circuit, shall not contribute more than 10 % to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of change of ownership.

2.2.1.5 The proposed Small Generating Facility, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including, but not limited to, substation breakers, fuse cutouts, and line reclosers), or Interconnection Customer equipment on the system to exceed 87.5 % of the short circuit interrupting capability; nor shall the interconnection be proposed for a circuit that already exceeds 87.5 % of the short circuit interrupting capability.

2.2.1.6 Using the table below, determine the type of interconnection to a primary distribution line. This screen includes a review of the type of electrical service provided to the Interconnecting Customer, including line configuration and the transformer connection to limit the potential for creating over-voltages on the Interconnecting Transmission Owner's electric power system due to a loss of ground during the operating time of any anti-islanding function.

Primary Distribution Line Type	Type of Interconnection to Primary Distribution Line	Result/Criteria
Three-phase, three wire	3-phase or single phase, phase-to-phase	Pass screen
Three-phase, four wire	Effectively-grounded 3 phase or Single-phase, line-to-neutral	Pass screen

2.2.1.7 If the proposed Small Generating Facility is to be interconnected on single-phase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed Small Generating Facility, shall not exceed 20 kW.

2.2.1.8 If the proposed Small Generating Facility is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20 % of the nameplate rating of the service transformer.

2.2.1.9 The Small Generating Facility, in aggregate with other generation interconnected to the transmission side of a substation transformer feeding the circuit where the Small Generating Facility proposes to interconnect shall not exceed 10 MW in an area where there are known, or posted, transient stability limitations to generating units located in the general electrical vicinity (e.g., three or four transmission busses from the point of interconnection).

2.2.1.10 No construction of facilities by the Interconnecting Transmission Owner on its own system shall be required to accommodate the Small Generating Facility.

2.2.2 If the proposed interconnection passes the screens, the Interconnection Request shall be approved for Network Resource interconnection Service and the System Operator in conjunction with the Interconnecting Transmission Owner will provide the Interconnection Customer an executable SGIA within five (5) Business Days after the determination.

2.2.3 If the proposed interconnection fails the screens, but the System Operator in conjunction with the Interconnecting Transmission Owner determines that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards, the System Operator in conjunction with the Interconnecting Transmission Owner shall provide the Interconnection Customer an executable SGIA within five (5) Business Days after the determination. If the Interconnection Request is for Capacity Network Resource Interconnection Service, the Interconnection Customer must also comply with the milestones for CNR Interconnection Service specified in Section 1.7.1.3 of the SGIP.

2.2.4 If the proposed interconnection fails the screens, but the System Operator in conjunction with the Interconnecting Transmission Owner, does not or cannot determine from the initial review that the Small Generating Facility may nevertheless be interconnected consistent with safety, reliability, and power quality standards unless the Interconnection Customer is willing to consider minor modifications or further study, the System Operator in conjunction with the Interconnecting Transmission Owner shall provide the Interconnection Customer with the opportunity to attend a customer options meeting.

### **2.3 Customer Options Meeting**

If the System Operator in conjunction with the Interconnecting Transmission Owner determines the Interconnection Request cannot be approved without (1) minor modifications at minimal cost, (2) a supplemental study or other additional studies or actions, or (3) incurring significant cost to address safety, reliability, or power quality problems, the System Operator shall notify the Interconnection Customer of that determination within five (5) Business Days after the determination and provide copies of all data and analyses underlying its conclusion. Within ten (10) Business Days of such determination, the System Operator shall offer to convene a customer options meeting with the Interconnection Customer and Interconnecting Transmission Owner to review possible Interconnection Customer facility modifications or the screen analysis and related results, to determine what further steps are needed to

permit the Small Generating Facility to be connected safely and reliably. At the time of notification of the determination, or at the customer options meeting:

2.3.1 The Interconnecting Transmission Owner shall offer to perform facility modifications or minor modifications to the Interconnecting Transmission Owner's electric system (e.g., changing meters, fuses, relay settings) and provide a non-binding good faith estimate of the limited cost to make such modifications to the Interconnecting Transmission Owner's electric system. If the Interconnection Customer agrees to pay for the modifications to the Interconnecting Transmission Owner's electric system, the System Operator in conjunction with the Interconnecting Transmission Owner will provide the Interconnection Customer with an executable SGIA within ten (10) Business Days of the customer options meeting; or

2.3.2 The System Operator shall offer to perform a supplemental review in accordance with section 2.4 and provide a non-binding good faith estimate of the costs of such review; or

2.3.3 The System Operator shall obtain the Interconnection Customer's agreement to continue evaluating the Interconnection Request under the section 3 Study Process.

## **2.4 Supplemental Review**

2.4.1 To accept the offer of a supplemental review, the Interconnection Customer shall agree in writing and submit a deposit to the System Operator for the estimated costs of the supplemental review in the amount of the System Operator's and Interconnecting Transmission Owner's good faith estimate of the costs of such review, both within fifteen (15) Business Days of the offer. If the written agreement and deposit have not been received by the System Operator within that timeframe, the Interconnection Request shall continue to be evaluated under the section 3 Study Process unless it is withdrawn by the Interconnection Customer.

2.4.2 The Interconnection Customer must specify the order in which the System Operator in conjunction with the Interconnecting Transmission Owner will complete the screens in section 2.4.4.

2.4.3 The Interconnection Customer shall be responsible for the System Operator's and the Interconnecting Transmission Owner's actual costs for conducting the supplemental review. The Interconnection Customer must pay any review costs that exceed the deposit within twenty (20) Business Days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced costs, the

System Operator and Interconnecting Transmission Owner will return such excess within twenty (20) Business Days of the invoice without interest.

2.4.4 Within thirty (30) Business Days following receipt of the deposit for a supplemental review, the System Operator shall (1) in conjunction with the Interconnecting Transmission Owner, perform a supplemental review using the screens set forth below; (2) notify in writing the Interconnection Customer of the results; and (3) include with the notification copies of the analysis and data underlying the System Operator's and Interconnecting Transmission Owner's determinations under the screens. Unless the Interconnection Customer provided instructions for how to respond to the failure of any of the supplemental review screens below at the time the Interconnection Customer accepted the offer of supplemental review, the System Operator shall notify the Interconnection Customer following the failure of any of the screens, or if the System Operator in conjunction with the Interconnecting Transmission Owner is unable to perform the screen in section 2.4.4.1, within two (2) Business Days of making such determination to request Interconnection Customer's permission to: (1) continue evaluating the proposed interconnection under this section 2.4.4; (2) terminate the supplemental review and continue evaluating the Small Generating Facility under section 3; or (3) terminate the supplemental review upon withdrawal of the Interconnection Request by the Interconnection Customer.

2.4.4.1 Minimum Load Screen: Where twelve (12) months of line section minimum load data (including onsite load but not station service load served by the proposed Small Generating Facility) are available, can be calculated, can be estimated from existing data, or determined from a power flow model, the aggregate Generating Facility capacity on the line section is less than 100% of the minimum load for all line sections bounded by automatic sectionalizing devices upstream of the proposed Small Generating Facility. If minimum load data is not available, or cannot be calculated, estimated or determined, the System Operator in conjunction with the Interconnecting Transmission Owner shall include the reason(s) that it is unable to calculate, estimate or determine minimum load in its supplemental review results notification under section 2.4.4.

2.4.4.1.1 The type of generation used by the proposed Small Generating Facility will be taken into account when calculating, estimating, or determining circuit or line section minimum load relevant for the application of screen 2.4.4.1. Solar photovoltaic (PV) generation systems with no battery storage use daytime minimum load (i.e. 10 a.m. to 4 p.m. for fixed panel systems and 8 a.m. to 6 p.m. for PV\_systems utilizing tracking systems), while all other generation uses absolute minimum load.

2.4.4.1.2 When this screen is being applied to a Small Generating Facility that serves some station service load, only the net injection into the Interconnecting Transmission Owner's electric system will be considered as part of the aggregate generation.

2.4. 4.1.3 The System Operator and the Interconnecting Transmission Owner will not consider as part of the aggregate generation for purposes of this screen generating facility capacity known to be already reflected in the minimum load data.

2.4.4.2 Voltage and Power Quality Screen: In aggregate with existing generation on the line section: (1) the voltage regulation on the line section can be maintained in compliance with relevant requirements under all system conditions; (2) the voltage fluctuation is within acceptable limits as defined by Institute of Electrical and Electronics Engineers (IEEE) Standard 1453, or utility practice similar to IEEE Standard 1453; and (3) the harmonic levels meet IEEE Standard 519 limits.

2.4.4.3 Safety and Reliability Screen: The location of the proposed Small Generating Facility and the aggregate generation capacity on the line section do not create impacts to safety or reliability that cannot be adequately addressed without application of the Study Process. The System Operator in conjunction with the Interconnecting Transmission Owner shall give due consideration to the following and other factors in determining potential impacts to safety and reliability in applying this screen.

2.4.4.3.1 Whether the line section has significant minimum loading levels dominated by a small number of customers (e.g., several large commercial customers).

2.4.4.3.2 Whether the loading along the line section is uniform or even.

2.4.4.3.3 Whether the proposed Small Generating Facility is located in close proximity to the substation (i.e., less than 2.5 electrical circuit miles), and whether the line section from the substation to the Point of Interconnection is a Mainline rated for normal and emergency ampacity.

2.4.4.3.4 Whether the proposed Small Generating Facility incorporates a time delay function to prevent reconnection of the generator to the system until system voltage and frequency are within normal limits for a prescribed time.

2.4.4.3.5 Whether operational flexibility is reduced by the proposed Small Generating Facility, such that transfer of the line section(s) of the Small Generating Facility to a neighboring distribution circuit/substation may trigger overloads or voltage issues.

2.4.4.3.6 Whether the proposed Small Generating Facility employs equipment or systems certified by a recognized standards organization to address technical issues such as, but not limited to, islanding, reverse power flow, or voltage quality.

2.4.5 If the proposed interconnection passes the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, the Interconnection Request shall be approved and the System Operator in conjunction with the Interconnecting Transmission Owner will provide the Interconnection Customer with an executable SGIA within the timeframes established in sections 2.4.5.1 and 2.4.5.2 below. If the proposed interconnection fails any of the supplemental review screens and the Interconnection Customer does not withdraw its Interconnection Request, it shall continue to be evaluated under the section 3 Study Process consistent with section 2.4.5.3 below.

2.4.5.1 If the proposed interconnection passes the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above and does not require construction of facilities by the Interconnecting Transmission Owner on its own system, the SGIA shall be provided within ten (10) Business Days after the notification of the supplemental review results.

2.4.5.2 If Interconnection Facilities or minor modifications to the Interconnecting Transmission Owner's system are required for the proposed interconnection to pass the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, and the Interconnection Customer agrees to pay for the modifications to the Interconnecting Transmission Owner's electric system, the SGIA, along with a non-binding good faith estimate for the Interconnection Facilities and/or minor modifications, shall be provided to the Interconnection Customer within fifteen (15) Business Days after receiving written notification of the supplemental review results.

2.4.5.3 If the proposed interconnection would require more than Interconnection Facilities or minor modifications to the Interconnecting Transmission Owner's system to pass the supplemental screens in sections 2.4.4.1, 2.4.4.2, and 2.4.4.3 above, the System Operator shall notify the Interconnection Customer, at the same time it notifies the Interconnection Customer with the supplemental review results,



that the Interconnection Request shall be evaluated under the section 3 Study Process unless the Interconnection Customer withdraws its Small Generating Facility.

### **SECTION 3. STUDY PROCESS**

#### **3.1 Applicability**

The Study Process shall be used by an Interconnection Customer proposing to interconnect its Small Generating Facility with the Administered Transmission System if the Small Generating Facility is no larger than 20 MW and does not meet the eligibility requirements of section 2.1 or does not pass the Fast Track Process or the 10 kW Inverter Process.

#### **3.2 Scoping Meeting**

3.2.1 A scoping meeting will be held within ten (10) Business Days after the Interconnection Request is deemed complete, or as otherwise mutually agreed to by the Parties. The System Operator, the Interconnecting Transmission Owner, the Interconnection Customer and the Affected Party(ies) will bring to the meeting personnel, including system engineers and other resources as may be reasonably required to accomplish the purpose of the meeting. Before participating in a scoping meeting with an Interconnection Customer that is also an Affiliate, the Interconnecting Transmission Owner shall post on the OASIS an advance notice of its intent to do so.

3.2.2 The purpose of the scoping meeting is to discuss the Interconnection Request and review existing studies relevant to the Interconnection Request, including: (i) the estimated timeline for completing all applicable Interconnection Studies, (ii) exchange pertinent information including any transmission data that would reasonably be expected to impact interconnection options, (iii) analyze such information, and (iv) determine the potential feasible Points of Interconnection, and (v) to discuss any other information necessary to facilitate the administration of the Interconnection Procedures. A PSCAD model is required for all wind and inverter-based Small Generating Facilities. If a PSCAD model is required for other Small Generating Facility types, the Parties shall discuss this at the Scoping Meeting. The Parties shall discuss whether the System Operator should perform an Interconnection Feasibility Study or proceed directly to an Interconnection System Impact Study, or an Interconnection Facilities Study, or an SGIA. If the Interconnection Customer provides the technical data called for in Attachment 2 (including Attachment A, if applicable) to this SGIP with the Interconnection Request, the Parties shall discuss the detailed project design at the Scoping Meeting.

Unless the Interconnection Request has been identified to be included in a CRPS or eligible for inclusion in a CSIS, within five (5) Business Days following the scoping meeting, the Interconnection Customer shall notify the System Operator, in writing: (i) whether it wants the Interconnection Feasibility Study to be completed, as a separate and distinct study or as part of the Interconnection System Impact Study, (ii) if requesting the Interconnection Feasibility Study be completed as a separate and distinct study, which of the alternative study scopes is being selected pursuant to Section 3.3.2, and (iii) the Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection for inclusion in the attachment to the Interconnection Feasibility Study Agreement (Attachment 6), or the Interconnection System Impact Study Agreement (Attachment 7) if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

3.2.3 The scoping meeting may be omitted by mutual agreement. In order to remain in consideration for interconnection, an Interconnection Customer who has requested an Interconnection Feasibility Study must return the executed Interconnection Feasibility Study Agreement (or Interconnection System Impact Study Agreement if the Interconnection Customer elected not to pursue the Interconnection Feasibility Study), within fifteen (15) Business Days.

### **3.3 Interconnection Feasibility Study**

**3.3.1 Interconnection Feasibility Study Agreement.** Within five (5) Business Days following the Interconnection Customer's request for an Interconnection Feasibility Study, the System Operator shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement signed by the System Operator and Interconnecting Transmission Owner, including an outline of the scope of the Interconnection Feasibility Study and a non-binding good faith estimate of the cost to perform the Interconnection Feasibility Study. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). No later than fifteen (15) Business Days after its receipt of the Interconnection Feasibility Study Agreement, the Interconnection Customer shall execute and deliver the agreement, including completed attachments, to System Operator and the Interconnecting Transmission Owner, together with the refundable deposit of the lesser of 50 percent of the good faith estimated Interconnection Feasibility Study costs or earnest money of \$1,000. The deposit shall be applied toward the cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit

also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection Feasibility Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer. The System Operator and/or Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Interconnection Feasibility Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner on the Interconnection Feasibility Study, including the development of the study agreement and its attachment(s). The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Feasibility Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. System Operator shall continue to hold any amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

**3.3.2 Scope of Interconnection Feasibility Study.** The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Administered Transmission System with available data and information. The Interconnection Feasibility Study will consider the Base Cases as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection Feasibility Study). An Interconnection Customer with a CNR Interconnection Request may also request that the Interconnection Feasibility Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer’s Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection Feasibility Study Agreement. The Interconnection Feasibility Study will consist of a power flow, including thermal analysis and voltage analysis, and short circuit analysis. The Interconnection Feasibility Study report will

provide (i) a list of facilities and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct the Interconnection Facilities and Network Upgrades; (iii) a protection assessment to determine the required Interconnection Facilities; and may provide (iv) an evaluation of the siting of Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environmental work for Interconnection Facilities and Network Upgrades.

Alternatively, in the case where the Interconnection Customer requests that the Interconnection Feasibility Study be completed as a separate and distinct study, the Interconnection Customer may provide the technical data called for in Appendix 1, Attachment A with the executed Interconnection Feasibility Study Agreement and request that the Interconnection Feasibility Study consist of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Small Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting. In this case, the Interconnection Feasibility Study report will provide (i) the study findings; and, (ii) a preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Small Generating Facility as identified within the scope of the analysis performed as part of the study.

To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 3.3, the Interconnection Feasibility Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

**3.3.3 Interconnection Feasibility Study Procedures.** The System Operator in coordination with Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than thirty (30) Business Days after System Operator and Interconnecting Transmission Owner receive the fully executed Interconnection Feasibility Study Agreement, study deposit and required technical data in accordance with Section 3.3.1. At the request of the Interconnection Customer or at any time the System Operator or the Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, the System Operator shall notify the Interconnection Customer as to

the schedule status of the Interconnection Feasibility Study. If the System Operator is unable to complete the Interconnection Feasibility Study within that time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.

**3.3.4 Meeting with Parties.** Within ten (10) Business Days of providing an Interconnection Feasibility Study report to the Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Feasibility Study.

**3.3.5 Re-Study.** If re-study of the Interconnection Feasibility Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resources(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than thirty (30) Business Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Feasibility Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Feasibility Study Agreement. The Interconnection Customer shall have the option to waive the re-study and elect to have the re-study performed as part of its Interconnection System Impact Study. The Interconnection Customer shall provide written notice of the waiver and election of moving directly to the Interconnection System Impact Study within five (5) Business Days of receiving notice from the System Operator of the required re-study.

### **3.4 Interconnection System Impact Study**

**3.4.1 Interconnection System Impact Study Agreement.** Within five (5) Business Days following the Interconnection Feasibility Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer the Interconnection System Impact Study Agreement,

which includes a non-binding good faith estimate of the cost and timeframe to perform the Interconnection System Impact Study. The Interconnection System Impact Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the SGIA.

**3.4.2 Execution of Interconnection System Impact Study Agreement.** The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement, including completed attachments, to the System Operator no later than fifteen (15) Business Days after its receipt along with (1) demonstration of Site Control, (2) a refundable deposit of 50 percent of the good faith estimated cost for the transmission portion of the Interconnection System Impact Study and 100 percent of the good faith estimated cost for the distribution portion of the Interconnection System Impact Study, and (3) a PSCAD model if one was determined to be needed at the Scoping Meeting; provided that if a PSCAD model was determined to be needed for the non-wind or non-inverter-based Small Generating Facility at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. The deposit shall be applied toward the cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the SGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection System Impact Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer. The System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of Interconnection System Impact Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the System Impact Study, including the study agreement and its attachment(s) and the SGIA. In the case of Clustering, CSIS costs that are associated with an individual Interconnection Request assessed within the CSIS will be

charged directly to that Interconnection Customer. CSIS costs that are associated with the CSIS as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster.

The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the transmission portion of the Interconnection System Impact Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

**3.4.3 Scope of Interconnection System Impact Study.** The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability and operation of the New England Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection System Impact Study). An Interconnection Customer with a CNR Interconnection Request that elected to waive the Interconnection Feasibility Study may also request that the Interconnection System Impact Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer’s Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection System Impact Study Agreement. The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis and any other analyses, such as electromagnetic transient analysis, that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner. The Interconnection System Impact Study report will state the assumptions upon which it is based, state the results of the analyses, and provide the requirements or potential impediments

to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Interconnection System Impact Study report will provide (i) a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility, (ii) a non-binding good faith estimated time to construct, (iii) a protection assessment to determine the required protection upgrades; and may provide (iv) an evaluation of the siting of the Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environmental work. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 3.4.3, the Interconnection System Impact Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

**3.4.4 Interconnection System Impact Study Procedures.** The System Operator shall coordinate the Interconnection System Impact Study with the Interconnecting Transmission Owner, and with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, that is affected by the Interconnection Request. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection System Impact Study within forty-five (45) Business Days after the receipt of the Interconnection System Impact Study Agreement, study deposit, demonstration of Site Control, if Site Control is required, and required technical data in accordance with Section 3.4.2. If the System Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within the times specified in this Section 3.4.4. At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the System Operator and Interconnecting Transmission Owner are unable to complete the Interconnection System Impact Study within the time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required.



Except in the case of a CSIS, the System Operator shall notify the Interconnection Customer when the Interconnection System Impact Study is expected to commence within sixty-five (65) Calendar Days. An Interconnection Customer with an Interconnection Request being studied serially will be permitted to update the technical data provided in Attachment 2 of this SGIP and any attachments thereto, and submit modifications to that technical data to the System Operator no later than sixty (60) Calendar Days from the date that the System Operator notified the Interconnection Customer that the Interconnection System Impact Study is expected to commence. Such modifications will not be deemed Material Modifications unless the changes require a new Interconnection Request in accordance with Section 1.5.5 of this SGIP.

Where sufficient time has elapsed since the initial Scoping Meeting, within ten (10) Business Days after notifying the Interconnection Customer that the Interconnection System Impact Study is expected to commence, the System Operator may convene a second Scoping Meeting for the purpose of providing updated information to the Interconnection Customer in preparation for the submittal of updates to the technical data.

**3.4.5 Meeting with Parties.** Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, the System Operator shall convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, to discuss the results of the Interconnection System Impact Study. Within ten (10) Business Days following the study results meeting, the Interconnection Customer shall provide to the System Operator written notice that it will either pursue the Interconnection Facilities Study or waive the Interconnection Facilities Study and elect an expedited interconnection. Once the Interconnection Customer notifies the System Operator of its election, such election is not subject to change. If the Interconnection Customer elects to pursue the Facilities Study it must proceed with the study. If the Interconnection Customer waives the Facilities Study, it shall commit to the following milestones in the SGIA: (i) Siting approval for the Generating Facility and Interconnection Facilities; (ii) Engineering of Interconnection Facilities approved by Interconnecting Transmission Owner; (iii) Ordering of long lead time material for Interconnection Facilities and system upgrades; (iv) Initial Synchronization Date; and (v) Commercial Operation Date.

Within thirty (30) Calendar Days of the Interconnection Customer receiving the Interconnection System Impact Study report, the Interconnection Customer shall provide written comments on the report or written notice that it has no comments on the report. The System Operator shall issue a final

Interconnection System Impact Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving the Interconnection Customer's notice that it will not provide comments.

**3.4.6 Re-Study.** If re-study of the Interconnection System Impact Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resources(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than thirty (30) Business Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection System Impact Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection System Impact Study Agreement.

**3.4.7 Operational Readiness.** The System Operator shall, as close to the Interconnection Customer's actual Synchronization Date as reasonably possible, ensure that operational analysis, including current stability analyses, power flow analyses, and any other analyses deemed necessary by the System Operator, are performed, and that procedures are developed or updated to address the operation of the New England Transmission System with the addition of the Interconnection Customer's Generating Facility. The operational analysis will also include tests of system performance with selected facilities out of service. Such studies shall be performed at the expense of the Interconnection Customer. The System Operator is not obligated to perform the operational analyses described in this Section 3.4.7 if, in the exercise of reasonable discretion, the System Operator in consultation with Interconnecting Transmission Owner determines that interconnection of the Interconnection Customer's Generating Facility to the Administered Transmission System is remote and speculative.

### **3.5 Interconnection Facilities Study**

**3.5.1 Interconnection Facilities Study Agreement.** Except as otherwise provided in Section 1.5.3.4 of this SGIP, the Interconnection Customer may waive the Interconnection Facilities Study and instead elect expedited interconnection and proceed with a SGIA in accordance with the requirements specified in

Section 4.8. If the Interconnection Customer elects to proceed with an Interconnection Facilities Study, the System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Attachment 8 to this SGIP simultaneously with the delivery of the Interconnection System Impact Study report to the Interconnection Customer. The Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection Facilities Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the SGIA. Within five (5) Business Days following the Interconnection Customer's Interconnection System Impact Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to the Interconnection Customer the Interconnection Facilities Study Agreement along with a non-binding good faith estimate of the cost to perform the Interconnection Facilities Study. The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement, including completed attachments, to the System Operator within thirty (30) Business Days after its receipt, together with the required refundable deposit of the non-binding good faith estimated costs for the Interconnection Facilities Study. Any difference between the study deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer. The System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the cost of the Interconnection Facilities Studies that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Interconnection Facilities Study, the study agreement and its attachment(s) and the SGIA. In the case of Clustering, CFAC costs that are associated with an individual Interconnection Request assessed within the CFAC will be charged directly to that Interconnection Customer. CFAC costs that are associated with the CFAC as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

**3.5.2 Scope of Interconnection Facilities Study.** The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the Interconnection System Impact Study in

accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Administered Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Interconnecting Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The scope and cost of the Interconnection Facilities Study shall include completion of any engineering work limited to what is reasonably required to (i) estimate such aforementioned cost, (ii) identify configurations of required facilities, and (iii) identify time requirements for construction and installation of required facilities. Design for any required Interconnection Facilities and/or Network Upgrades shall also be performed under the Interconnection Facilities Study. The Interconnection Customer, the System Operator, the Interconnecting Transmission Owner, and the Affected Party(ies), if any, may agree to allow the Interconnection Customer to separately arrange for the design of some of the Interconnection Facilities. In such cases, facilities design shall be reviewed and may be modified prior to acceptance by the Interconnecting Transmission Owner, under the provisions of the Interconnection Facilities Study Agreement. If the Parties agree to separately arrange for design and construction, and provided security and confidentiality requirements can be met, the System Operator and/or the Interconnecting Transmission Owner shall make sufficient information available to the Interconnection Customer in accordance with confidentiality and critical infrastructure requirements to permit the Interconnection Customer to obtain any independent design and cost estimates for any necessary facilities.

**3.5.3 Interconnection Facilities Study Procedures.** The System Operator shall coordinate the Interconnection Facilities Study with Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the study and the System Operator shall issue a draft Interconnection Facilities Study report to the Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: forty-five (45) Business Days if upgrades are necessary, or thirty (30) Business Days if upgrades are not necessary. If the System Operator uses Clustering, the System Operator and Interconnecting

Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection Facilities Study within the times specified in this Section 3.5.3.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Facilities Study, System Operator shall notify the Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, as to the schedule status of the Interconnection Facilities Study. If the System Operator is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, the System Operator shall notify the Interconnection Customer, Interconnecting Transmission Owner and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and provide an estimated completion date and an explanation of the reasons why additional time is required. The Interconnection Customer and appropriate Affected Parties may, within thirty (30) Business Days after receipt of the draft report, provide written comments to the System Operator and Interconnecting Transmission Owner, which the System Operator shall include in the final report. The System Operator shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving the Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The System Operator may reasonably extend such fifteen-day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the System Operator or Interconnecting Transmission Owner to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities report. Upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, or any third party consultant retained by the Interconnection Customer or to any non-market affiliate of the Interconnection Customer supporting documentation, with workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study. The recipient(s) of such information shall be subject to the confidentiality provisions of this SGIP and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

**3.5.4 Meeting with Parties.** Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Facilities Study. Within thirty (30) Business Days of receipt of the study results, the Interconnection Customer shall provide written notice whether it agrees to pay for the Interconnection Facilities and upgrades identified in the Interconnection Facilities Study. An executable SGIA shall be tendered by the System Operator in conjunction with the Interconnecting Transmission Owner to the Interconnection Customer within five (5) Business Days of receipt of such agreement.

**3.5.5 Re-Study.** If re-study of the Interconnection Facilities Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall so notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than thirty (30) Business Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Facilities Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Facilities Study Agreement.

## **SECTION 4. PROVISIONS THAT APPLY TO ALL INTERCONNECTION REQUESTS**

### **4.1 Reasonable Efforts**

The System Operator and Interconnecting Transmission Owner shall make Reasonable Efforts to meet all time frames provided in these procedures unless the System Operator, the Interconnecting Transmission Owner and the Interconnection Customer agree to a different schedule. If the System Operator or Interconnecting Transmission Owner cannot meet a deadline provided herein, it shall notify the other Parties, explain the reason for the failure to meet the deadline, and provide an estimated time by which it will complete the applicable interconnection procedure in the process.

## **4.2 Disputes**

4.2.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.

4.2.2 In the event of a dispute, the Party initiating the dispute resolution process shall provide the other Party(ies) with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.

4.2.3 If the dispute has not been resolved within two (2) Business Days after receipt of the Notice, any Party may contact the Commission's Dispute Resolution Service (DRS) for assistance in resolving the dispute.

4.2.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

4.2.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for its own costs and its pro rata share of any costs paid to the neutral party and any associated common negotiating costs.

4.2.6 If none of the Parties elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then each Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of these procedures.

## **4.3 Interconnection Metering**

Any metering necessitated by the use of the Small Generating Facility shall be installed at the Interconnection Customer's expense in accordance with Commission, state, or local regulatory requirements and with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **4.4 Commissioning**

Commissioning tests of the Interconnection Customer's installed equipment shall be performed pursuant to applicable codes and standards.

4.4.1 The System Operator and the Interconnecting Transmission Owner must be given at least five (5) Business Days written notice, or as otherwise mutually agreed to by the Parties, of the tests and may be present to witness the commissioning tests.

#### **4.5 Confidentiality**

4.5.1 Confidential information shall mean any confidential and/or proprietary information provided by one Party to the other Party(ies) that is clearly marked or otherwise designated “Confidential.” For purposes of these procedures all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed confidential information regardless of whether it is clearly marked or otherwise designated as such. Confidential information shall include, without limitation, all information treated as confidential under the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party’s technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the others prior to the execution of an SGIA.

4.5.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party(ies) and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce these procedures. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under these procedures, or to fulfill legal or regulatory requirements.

4.5.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party(ies) as it employs to protect its own Confidential Information.

4.5.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.

4.5.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if the Commission, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to these procedures, the Party shall provide the requested information to the Commission, within the time provided for in the request for



information. In providing the information to the Commission, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by the Commission and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) prior to the release of the Confidential Information to the Commission. The Party shall notify the other Party(ies) when it is notified by the Commission that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

#### **4.6 Comparability**

The System Operator shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this document. The System Operator and Interconnecting Transmission Owner shall use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the Small Generating Facility is owned or operated by the Interconnecting Transmission Owner, its subsidiaries or affiliates, or others.

#### **4.7 Record Retention**

The System Operator shall maintain for three years records, subject to audit, of all Interconnection Requests received under these procedures, the times required to complete Interconnection Request approvals and disapprovals, and justification for the actions taken on the Interconnection Requests.

#### **4.8 SGIA**

In accordance with Section 3, the System Operator and the Interconnecting Transmission Owner shall tender to the Interconnection Customer a draft SGIA, together with draft attachments completed to the extent practicable. The Interconnection Customer shall return the Interconnection Customer specific information required to complete the form SGIA, including the attachments, within fifteen (15) Business Days. Within five (5) Business Days, the System Operator and the Interconnecting Transmission Owner shall issue a final draft of the SGIA to the Interconnection Customer.

The Interconnection Customer and the Interconnecting Transmission Owner shall have fifteen (15) Business Days or another mutually agreeable timeframe to sign three (3) originals of the SGIA and return them to the System Operator, who will send an original fully executed SGIA to Interconnecting Transmission Owner and Interconnection Customer, or the Interconnection Customer shall request that

an unexecuted SGIA be filed with the Commission. If the Interconnection Customer does not sign the SGIA, or ask that it be filed unexecuted within thirty (30) Business Days after its receipt of the final draft of the SGIA, the Interconnection Request shall be deemed withdrawn. After the SGIA is signed by the Parties, the interconnection of the Small Generating Facility shall proceed under the provisions of the SGIA.

The Interconnection Customer, the Interconnecting Transmission Owner and the System Operator shall be Parties to the SGIA.

Within fifteen (15) Business Days after receipt of the final SGIA, an Interconnection Customer with an Interconnection Request studied using Clustering that provided the additional Cluster Participation Deposit in accordance with Section 1.5.3.4.4 shall provide to the Interconnecting Transmission Owner, in cash, a potentially non-refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades, including any CETUs, identified in the CFAC, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final SGIA. If the Interconnection Customer does not submit this deposit (or make the initial payment) by the fifteenth Business Day after receipt of the final SGIA, the Interconnection Request shall be automatically withdrawn from the interconnection queue without further opportunity to cure, and the Interconnection Customer's initial and additional Cluster Participation Deposits shall become non-refundable. The non-refundable initial and additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in the cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation. If an Interconnection Request is withdrawn after the Interconnection Customer's payment of twenty (20) percent of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner, then the payment shall be used to offset the costs of the CETU. Any unspent payments of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner will be refunded to the respective Interconnection Customers that executed the Interconnection Agreement and provided to the Interconnecting Transmission Owner the twenty (20) percent deposit (or initial payment) if all the associated Interconnection Requests are withdrawn from the interconnection queue and the associated Interconnection Agreements are terminated.

#### **4.9 Coordination with Affected Systems**

The System Operator shall coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected System operators and, if possible, include those results (if available) in its applicable interconnection study within the time frame specified in these procedures. The System Operator will include such Affected System operators in all meetings held with the Interconnection Customer as required by the SGIP. The Interconnection Customer will cooperate with the System Operator and the Interconnecting Transmission Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. The Interconnection Customer shall be responsible for the costs associated with the studies or portions of studies associated with the Affected Systems. Payment and refunds associated with the costs of such studies will be coordinated between the Interconnection Customer and the Affected Party(ies). The System Operator shall seek the cooperation of all Affected Parties in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Nothing in the foregoing is intended to authorize the Interconnection Customer to receive interconnection, related facilities or other services on an Affected System, and provision of such services must be handled through separate arrangements with Affected Parties.

#### **4.10 Evaluation of a Small Generating Facility Interconnection Request**

4.10.1 If the Interconnection Request is for an increase in capacity for an existing Small Generating Facility, the Interconnection Request shall be evaluated on the basis of the new total energy capability or capacity capability of the Small Generating Facility.

4.10.2 If the Interconnection Request is for a Small Generating Facility that includes multiple energy production devices at a site for which the Interconnection Customer seeks a single Point of Interconnection, the Interconnection Request shall be evaluated on the basis of the aggregate capacity of the multiple devices.

4.10.3 The Interconnection Request shall be evaluated using the maximum energy capability and capacity capability that the Small Generating Facility is capable of injecting into the Administered Transmission System. However, if the maximum energy capability and capacity capability that the Small Generating Facility is capable of injecting into the Administered Transmission System is limited (e.g., through use of a control system, power relay(s), or other similar device settings or adjustments), then the Interconnection Customer must obtain the System Operator's and Interconnecting Transmission Owner's agreement, with such agreement not to be unreasonably withheld, that the manner in which the Interconnection Customer proposes to implement such a limit will not adversely affect the safety and

reliability of the Administered Transmission System. If the System Operator and the Interconnecting Transmission Owner do not agree with the manner in which the Interconnection Customer proposes to implement the limit, then the Interconnection Request must be withdrawn or revised to specify the maximum energy capability and capacity capability that the Small Generating Facility is capable of injecting into the Administered Transmission System without such limitations. Furthermore, nothing in this section shall prevent the System Operator from considering an output higher than the limited output, if appropriate, when evaluating system protection impacts.

**Glossary of Terms**

**10 kW Inverter Process** – The procedure for evaluating an Interconnection Request for a certified inverter-based Small Generating Facility no larger than 10 kW that uses the section 2 screens. The application process uses an all-in-one document that includes a simplified Interconnection Request, simplified procedures, and a brief set of terms and conditions. See SGIP Attachment 5.

**Administered Transmission System** – The PTF and the Non-PTF.

**Affected Party**– The entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affected System** – Any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affiliate** – With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**At-Risk Expenditure** – Money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (i) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and surveys, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** – Base power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists provided by System Operator, Interconnecting Transmission Owner, and any

Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements; such databases and lists shall include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. Base Cases also include data provided by the Interconnection Customer, where applicable, to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** – The criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** – That portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** – The MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** – The study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** – The Interconnection Service selected by the Interconnection Customer to interconnect its Small Generating Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 1.5.3.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 1.5.3.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 1.5.3.3.2.2 and 1.5.3.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 1.5.3.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study

and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** – The status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** – For a unit, the date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Standard Small Generator Interconnection Agreement.

**Distribution System** – The Interconnecting Transmission Owner’s facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** – The additions, modifications, and upgrades to the Interconnecting Transmission Owner’s Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Fast Track Process** – The procedure for evaluating an Interconnection Request for a certified Small Generating Facility that meets the eligibility requirements of section 2.1 and includes the section 2 screens, customer options meeting, and optional supplemental review.

**Generating Facility** – The Interconnection Customer’s device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer’s Interconnection Facilities.

**Initial Synchronization Date** – The date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.



**In-Service Date** – The date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** – A Transmission Owner that owns, leases or otherwise possesses an interest, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Small Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Attachment 2 to the Standard Small Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** – Any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Small Generating Facility with the Administered Transmission System under the Standard Small Generator Interconnection Procedures.

**Interconnection Customer’s Interconnection Facilities** shall mean all facilities and equipment, as identified in Attachment 2 of the Standard Small Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer’s Interconnection Facilities are sole use facilities.

**Interconnection Facilities** – The Interconnecting Transmission Owner’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Small Generating Facility to the Administered Transmission System. Interconnection

Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** – A study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 3.5.2 of the Standard Small Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** – The form of agreement contained in Attachment 8 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** – A preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 3.3 of the Standard Small Generator Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and Section 3.4.

**Interconnection Feasibility Study Agreement** – The form of agreement contained in Attachment 6 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** – The Interconnection Request shall mean an Interconnection Customer's request, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed

Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of or add energy storage capability to the Small Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to 1.6.4 of this SGIP; (iv) make a modification to the operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected to the Administered Transmission System; (v) commence participation in the wholesale markets by, an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service for all or part of a Generating Facility's capability. Interconnection Request shall not include a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** – The service provided by the System Operator and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Small Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** – Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Small Generator Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** – Any of the following agreements: The Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, and the Interconnection Facilities Study Agreement attached to the Standard Small Generator Interconnection Procedures.

**Interconnection System Impact Study** – An engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in

the Scoping Meeting as described in the Standard Small Generator Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and Section 3.4.

**Interconnection System Impact Study Agreement** – The form of agreement contained in Attachment 7 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**Network Capability Interconnection Standard (“NC Interconnection Standard”)** – The minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Resource (“NR”)** – The portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** – The MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** – The Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s NR Interconnection Service shall be solely for the megawatt amount of the NR Capability. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** – Additions, modifications, and upgrades to the New England Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Administered Transmission System to accommodate the interconnection with the Small Generating Facility to the Administered Transmission System. Network Upgrades do not include Distribution Upgrades.

**Notice of Dispute** – A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

**Party**– The System Operator, Interconnecting Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Administered Transmission System.

**Queue Position** – The order of a valid request in the New England Control Area, relative to all other pending valid requests in the New England Control Area, that is established based upon the date and time of receipt of the valid Interconnection Request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a “higher-queued” Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as “lower-queued.”

**Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the SGIP or SGIA, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** – A Generating Facility having a maximum gross capability at or above zero degrees F of 20 MW or less.

**Stand Alone Network Upgrades** – Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their

construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Attachment 2 to the Standard Small Generator Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 3.3.2 and 3.4.3 of this SGIP.

**Study Process** – The procedure for evaluating an Interconnection Request that includes the section 3 scoping meeting, Interconnection Feasibility Study, Interconnection System Impact Study, and Interconnection Facilities Study.

**Tariff** - The System Operator's or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

**Trial Operation** – The period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Upgrades** – The required additions and modifications to the Administered Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**SMALL GENERATOR INTERCONNECTION REQUEST  
(Application Form)**

An Interconnection Request is considered complete when it provides all applicable and correct information required below. Per SGIP Section 1.4, documentation of Site Control must be submitted with the Interconnection Request, except where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the proposed modifications do not require additional real property.

\_\_\_\_\_ Site Control is not provided because the proposed modification is to the Interconnection Customer's existing Small Generating Facility and, by checking this option, the Interconnection Customer certifies that it has Site Control and that the proposed modification does not require additional real property.

**Preamble and Instructions**

An Interconnection Customer who requests a Federal Energy Regulatory Commission jurisdictional interconnection that is subject to this SGIP must submit this Interconnection Request to the System Operator via the Interconnection Request Tracking Tool or IRTT, a web-based application for submitting, tracking and viewing Interconnection Requests available on the ISO New England website.

**Processing Fee or Deposit:**

If the Interconnection Request is submitted under the Fast Track Process, the non-refundable processing fee is \$4.50/kW (minimum of \$300 and maximum of \$7,500). The kW are the maximum gross kW of the Small Generating Facility. The Fast Track Process is limited to a Small Generating Facility that meets the eligibility requirements of section 2.1 and certain codes, standards and certification requirements.

If the Interconnection Request is submitted under the Study Process, whether a new submission or an Interconnection Request that did not pass the Fast Track Process, the Interconnection Customer shall submit to the System Operator a non-refundable deposit of \$2,500 towards the cost of the scoping meeting, the development of the interconnection study agreements, interconnection studies, and

development of the SGIA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the non-refundable deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS.

**Interconnection Customer Information**

**Proposed Project Name:** \_\_\_\_\_

Legal Name of the Interconnection Customer (or, if an individual, individual's name)

Name: \_\_\_\_\_

ISO Customer ID# (if available): \_\_\_\_\_

Contact Person: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Facility Location (if different from above): \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Alternative Contact Information (if different from the Interconnection Customer)

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_



---

---

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Application is for: \_\_\_\_\_ New Small Generating Facility  
\_\_\_\_\_ Capacity addition to or modification of an existing Small Generating Facility  
\_\_\_\_\_ Commencement of participation in the wholesale markets by an existing Small Generating Facility  
\_\_\_\_\_ A change from Network Resource Interconnection Service to Capacity Network Resource Interconnection Service

If capacity addition to or modification of an existing facility, please describe: \_\_\_\_\_

---

If the capacity addition increases the maximum gross megawatt electrical output at an ambient temperature of 20 degrees F of the Generating Facility to more than 20 MW, the Interconnection Customer shall apply under Schedule 22.

Will the Small Generating Facility be used for any of the following?

Net Metering? Yes \_\_\_ No \_\_\_

To Supply Power to the Interconnection Customer? Yes \_\_\_ No \_\_\_

To Supply Power to Others? Yes \_\_\_ No \_\_\_

Is the Interconnection Request for:

Service Type (check one):

\_\_\_\_\_ Capacity Network Resource Interconnection Service (energy capability and capacity capability) or

\_\_\_\_\_ Network Resource Interconnection Service (energy capability only)

A retail customer interconnecting a new Small Generating Facility that will produce electric energy to be consumed only on the retail customer's site? Yes \_\_\_\_\_ No \_\_\_\_\_

A Qualifying Facility where 100% of the output will be sold to its host utility?

Yes \_\_\_\_\_ No \_\_\_\_\_

An Interconnection Customer interconnecting a new Small Generating Facility that plans to participate in the wholesale markets? Yes \_\_\_\_\_ No \_\_\_\_\_

An existing Small Generating Facility commencing participation in the wholesale markets?

Yes \_\_\_\_\_ No \_\_\_\_\_

For installations at locations with existing electric service to which the proposed Small Generating Facility will interconnect, provide:

\_\_\_\_\_  
(Local Electric Service Provider)

\_\_\_\_\_  
(Existing Account Number)

Contact Name: \_\_\_\_\_

Title: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

Telephone (Day): \_\_\_\_\_ Telephone (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

## Small Generating Facility Information

Interconnection Customer's Requested Initial Synchronization Date:

Interconnection Customer's Requested In-Service Date: \_\_\_\_\_

Interconnection Customer's Requested Commercial Operation Date: \_\_\_\_\_

Proposed Point of Interconnection: \_\_\_\_\_

Data apply only to the Small Generating Facility, not the Interconnection Facilities.

Energy Source: ☐ Solar ☐ Wind ☐ Hydro ☐ Hydro Type (e.g. Run-of-River): \_\_\_\_\_

☐ Diesel ☐ Natural Gas ☐ Fuel Oil ☐ Other (state type) \_\_\_\_\_

Prime Mover: ☐ Fuel Cell ☐ Recip Engine ☐ Gas Turb ☐ Steam Turb

☐ Microturbine ☐ PV ☐ Other

Type of Generator: ☐ Synchronous ☐ Induction ☐ Inverter

Generator Nameplate Rating: \_\_\_\_\_ kW (Typical) Generator Nameplate kVAR: \_\_\_\_\_

Interconnection Customer or Customer-Site Load: \_\_\_\_\_ kW (if none, so state)

Typical Reactive Load (if known): \_\_\_\_\_

Maximum Physical Export Capability Requested: \_\_\_\_\_ kW

Will the generator have energy storage capacity? Yes ☐ No ☐

If Yes, describe the energy storage device and specifications:

---

---

---

Provide the maximum output of each generator including each energy storage device: \_\_\_\_\_

Primary frequency response operating range for electric storage resources:

Minimum State of Charge: \_\_\_\_\_

Maximum State of Charge: \_\_\_\_\_

**Generating Facility Capacity (MW):**

	<b>Maximum Net MW Electrical Output</b>	<b>Maximum Gross MW Electrical Output</b>
<b>At 90 degrees F or higher</b>		
<b>At 50 degrees F or higher</b>		
<b>At 20 degrees F or higher</b>		
<b>At zero degrees F or higher</b>		

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

Is the prime mover compatible with the certified protective relay package? \_\_\_Yes \_\_\_No

Generator (or solar collector)

Manufacturer, Model Name & Number: \_\_\_\_\_

Version Number: \_\_\_\_\_

Nameplate Output Power Rating in kW: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Nameplate Output Power Rating in kVA: (Summer) \_\_\_\_\_ (Winter) \_\_\_\_\_

Individual Generator Power Factor

Rated Power Factor: Leading: \_\_\_\_\_ Lagging: \_\_\_\_\_

Total Number of Generators in wind farm to be interconnected pursuant to this

Interconnection Request: \_\_\_\_\_ Elevation: \_\_\_\_\_ \_\_\_Single phase \_\_\_Three phase

Inverter Manufacturer, Model Name & Number (if used): \_\_\_\_\_

List of adjustable set points for the protective equipment or software: \_\_\_\_\_

### Model Requirements

For all generation types: A completed, fully functioning, public (*i.e.*, non-proprietary or non-confidential) Siemens PTI's ("PSSE") power flow model or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flow ("PSLF") data sheet, must be supplied with this Interconnection Request. If additional public data sheets are more appropriate to the proposed device then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.

A PSCAD model for all wind and inverter-based Small Generating Facilities must be supplied with this Interconnection Request. If a PSCAD model is deemed required for other Generating Facility types at the Scoping Meeting, such PSCAD model must be provided to the System Operator within ninety (90) Calendar Days of the executed Interconnection System Impact Study Agreement. A benchmarking analysis consistent with the requirements in the ISO New England Planning Procedures, confirming acceptable performance of the PSS/E model in comparison to the PSCAD model, shall be provided at the time the PSCAD model is submitted.

### Small Generating Facility Characteristic Data (for inverter-based machines)

Max design fault contribution current: \_\_\_\_\_ Instantaneous \_\_\_\_ or RMS? \_\_\_\_\_

Harmonics Characteristics: \_\_\_\_\_

Start-up requirements: \_\_\_\_\_

### Small Generating Facility Characteristic Data (for rotating machines)

RPM Frequency: \_\_\_\_\_

Neutral Grounding Resistor (If Applicable): \_\_\_\_\_

Synchronous Generators:

Generator AC resistance  $R_a$ : \_\_\_\_\_

Direct Axis Synchronous Reactance,  $X_d$ : \_\_\_\_\_ P.U.

Direct Axis Transient Reactance,  $X'_d$ : \_\_\_\_\_ P.U.

Direct Axis Subtransient Reactance,  $X''_d$ : \_\_\_\_\_ P.U.

Negative Sequence Reactance,  $X_2$ : \_\_\_\_\_ P.U.

Zero Sequence Reactance,  $X_0$ : \_\_\_\_\_ P.U.

KVA Base: \_\_\_\_\_

Field Volts: \_\_\_\_\_

Field Amperes: \_\_\_\_\_

Induction Generators:

Motoring Power (kW): \_\_\_\_\_

$I_2^2 t$  or K (Heating Time Constant): \_\_\_\_\_

Rotor Resistance,  $R_r$ : \_\_\_\_\_

Stator Resistance,  $R_s$ : \_\_\_\_\_

Stator Reactance,  $X_s$ : \_\_\_\_\_

Rotor Reactance,  $X_r$ : \_\_\_\_\_

Magnetizing Reactance,  $X_m$ : \_\_\_\_\_

Short Circuit Reactance,  $X_d''$ : \_\_\_\_\_

Exciting Current: \_\_\_\_\_

Temperature Rise: \_\_\_\_\_

Frame Size: \_\_\_\_\_

Design Letter: \_\_\_\_\_

Reactive Power Required In Vars (No Load): \_\_\_\_\_

Reactive Power Required In Vars (Full Load): \_\_\_\_\_

Total Rotating Inertia, H: \_\_\_\_\_ Per Unit on kVA Base

Note: Please contact the System Operator prior to submitting the Interconnection Request to determine if the specified information above is required.

Excitation and Governor System Data for Synchronous Generators Only

Provide appropriate IEEE model block diagram of excitation system, governor system and power system stabilizer (PSS) in accordance with the regional reliability council criteria. A PSS may be determined to be required by applicable studies. A copy of the manufacturer's block diagram may not be substituted.

**Interconnection Facilities Information**

Will a transformer be used between the generator and the point of common coupling? \_\_\_ Yes \_\_\_ No

Will the transformer be provided by the Interconnection Customer? \_\_\_ Yes \_\_\_ No

Transformer Data (If Applicable, for Interconnection Customer-Owned Transformer):

Is the transformer: \_\_\_ single phase \_\_\_ three phase? Size: \_\_\_\_\_ kVA

Transformer Impedance: \_\_\_\_\_ % on \_\_\_\_\_ kVA Base

If Three Phase:

Transformer Primary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_\_\_ Wye \_\_\_\_\_ Wye Grounded

Transformer Secondary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_\_\_ Wye \_\_\_\_\_ Wye Grounded

Transformer Tertiary: \_\_\_\_\_ Volts \_\_\_\_\_ Delta \_\_\_\_\_ Wye \_\_\_\_\_ Wye Grounded

Transformer Fuse Data (If Applicable, for Interconnection Customer-Owned Fuse):

(Attach copy of fuse manufacturer's Minimum Melt and Total Clearing Time-Current Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Size: \_\_\_\_\_ Speed: \_\_\_\_\_

Interconnecting Circuit Breaker (if applicable):

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_

Load Rating (Amps): \_\_\_\_\_ Interrupting Rating (Amps): \_\_\_\_\_ Trip Speed (Cycles): \_\_\_\_\_

Interconnection Protective Relays (If Applicable):

If Microprocessor-Controlled:

List of Functions and Adjustable Setpoints for the protective equipment or software:

	Setpoint Function	Minimum	Maximum
11	_____	_____	_____
12	_____	_____	_____
13	_____	_____	_____
14	_____	_____	_____
15	_____	_____	_____
16	_____	_____	_____

If Discrete Components:

(Enclose Copy of any Proposed Time-Overcurrent Coordination Curves)

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:  
\_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:  
\_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:  
\_\_\_\_\_

Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:  
\_\_\_\_\_



Manufacturer: \_\_\_\_\_ Type: \_\_\_\_\_ Style/Catalog No.: \_\_\_\_\_ Proposed Setting:  
\_\_\_\_\_

Current Transformer Data (If Applicable):

(Enclose Copy of Manufacturer's Excitation and Ratio Correction Curves)

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

Potential Transformer Data (If Applicable):

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

Manufacturer: \_\_\_\_\_

Type: \_\_\_\_\_ Accuracy Class: \_\_\_\_ Proposed Ratio Connection: \_\_\_\_

**General Information**

Enclose two copies of site electrical one-line diagram showing the configuration of all Small Generating Facility equipment, current and potential circuits, and protection and control schemes. This one-line diagram must be signed and stamped by a licensed Professional Engineer if the Small Generating Facility is larger than 50 kW. Are two copies of One-Line Diagram Enclosed? \_\_\_\_ Yes \_\_\_\_ No

Enclose copy of any site documentation that indicates the precise physical location of the proposed Small Generating Facility (e.g., USGS topographic map or other diagram or documentation).

Proposed location of protective interface equipment on property (include address if different from the Interconnection Customer's address) \_\_\_\_\_

Enclose copy of any site documentation that describes and details the operation of the protection and control schemes. Is Available Documentation Enclosed? \_\_\_ Yes \_\_\_ No

Enclose copies of schematic drawings for all protection and control circuits, relay current circuits, relay potential circuits, and alarm/monitoring circuits (if applicable).

Are Schematic Drawings Enclosed? \_\_\_ Yes \_\_\_ No

### **Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Interconnection Request is true and correct.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

In order for a Small Generator Interconnection Request to be considered a valid request, it must:

- (a) Be accompanied by the applicable deposit that is provided electronically and which shall be non-refundable;*
- (b) Include documentation of Site Control, if applicable;*
- (c) Include a detailed map, such as a map of the quality produced by the U.S. Geological Survey, which clearly indicates the site of the new facility and pertinent surrounding structures;*
- (d) Include two copies, signed and stamped by a licensed Professional Engineer, of the site electrical one-line diagram; and*
- (e) Include all information and data required on the Interconnection Request form and any attachments thereto.*

The Interconnection Request must be submitted to the System Operator via the Interconnection Request Tracking Tool or IRTT.

## Attachment A to Interconnection Request Form

### SUPPLEMENTARY WIND AND INVERTER-BASED GENERATING FACILITY DATA FORM

- (a) Attach a Geographic Map Demonstrating the Project Layout and its Interconnection to the Power Grid. (Specify the name of the attachment here)
- (b) Attach a Bus-Breaker Based One-line Diagram (The diagram should include each of the individual wind unit, generator number, rating and terminal voltage.) (Specify the name of the attachment here)

**a. Collection system detail impedance sheet**

If a collector system is used, attach a collector system data sheet in accordance with the one-line diagram attached above. The data sheet should include: the type, length  $Z_0$ ,  $Z_1$  and  $X_c/B$  of each circuit (feeder and collector string).

Specify the name of the attachment here: \_\_\_\_\_

**b. Collection system aggregate (equivalent) model data sheet**

Attach an aggregate (equivalent) collection system data sheet. The data table should include: the type, length,  $Z_0$ ,  $Z_1$  and  $X_c/B$  of the equivalent circuits (feeders and collector strings).

Specify the name of the attachment here: \_\_\_\_\_

- (c) Summary of the Unit Models in the wind or inverter-based generating facility *(List all different unit models in the facility)*

Manufacturer Model	Type of this WTG* (if applicable)	Generator Unit Numbers in the field	Number(s) of these Units	Maximum Output of this Unit (MW)	Total MW

- \* Type 1 – Cage rotor induction generators
- Type 2 – Induction generators with variable rotor resistance
- Type 3 – Doubly-fed asynchronous generators with rotor-side converter
- Type 4 – Full-power converter interface

***Repeat the following sections from 4 to 12 for each different unit model.***

(d) Unit Detail Information

Unit Manufacturer Model	
Terminal Voltage	
Rating of Each Unit (MVA)	
Maximum Gross Electrical Output (MW)	
Minimum Gross Electrical Output(MW)	
Lagging Reactive Power Limit at Rated Real Power Output (MVAR)	
Leading Reactive Power Limit at Rated Real Power Output (MVAR)	
Lagging Reactive Power Limit at Zero Real Power Output (MVAR)	
Leading Reactive Power Limit at Zero Real Power Output (MVAR)	
Station Service Load(MW, MVAR)	
Minimum short circuit ratio(SCR) requirement by manufacturer	
On which bus the minimum SCR is required by manufacturer	
What voltage level the minimum SCR is required by manufacturer	
Positive sequence Xsource	
Zero sequence Xsource	

(e) Unit GSU – \_\_\_\_\_

Nameplate rating (MVA)	
Total number of the GSUs	
Voltages, generator side/system side	
Winding connections, low voltage/high voltage	
Available tap positions on high voltage side	
Available tap positions on low voltage side	
Will the GSU operate as an LTC?	
Desired voltage control range if LTC	
Tap adjustment time (Tap switching delay + switching time) if LTC	
Desired tap position if applicable	
Impedance, Z1, X/R ratio	
Impedance, Z0, X/R ratio	

(f) Low Voltage Ride Through(LVRT) – \_\_\_\_\_ *(Specify the Manufacturer Model of this Unit)*

Does each Unit have LVRT capability?

Yes\_\_ No\_\_

If yes, please provide:

**a. Unit LVRT mode activation and release condition:**

When operating at maximum real power, what is the Unit terminal voltage for LVRT mode activation? \_\_\_\_\_

When operating at maximum real power, what is the Unit terminal voltage for releasing LVRT mode after it is activated? \_\_\_\_\_

If there is different LVRT activation and release logic, please state here \_\_\_\_\_

**b. A wind or inverter-based generating facility technical manual from the manufacturer including description of LVRT functionality:**

***Attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- c. Does the wind or inverter-based generating facility technical manual attached above include a reactive power capability curve?

Yes\_\_

No\_\_

***If no, attach the file and specify the name of the attachment here:***

\_\_\_\_\_

- (g) Low Voltage Protection (considering LVRT functionality)

(Specify the Manufacturer Model of this Unit)

Low Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

- (h) High Voltage Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

High Voltage Setting (pu)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

- (i) Low Frequency Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

Low Frequency Setting (Hz)	Relay Pickup Time (Seconds)

\*Add more rows in the table as needed

10. High Frequency Protection - \_\_\_\_\_ (Specify the Manufacturer Model of this Unit)

High Frequency Setting (Hz)	Relay Pickup Time (Seconds)


\*Add more rows in the table as needed

**Please make sure the settings in sections 7 through 10 comply with NERC and NPCC standards for generator protection relays.**

- Unit Reactive Power Control - \_\_\_\_ (Specify the Manufacturer Model of this Unit)

- a. What are the options for the Unit reactive power control (check all available)?

☐ Control the voltage at the Unit terminal  
☐ Control constant power factor at the Unit terminal  
☐ Control constant power factor at the low side of the station main transformer  
☐ Control constant power factor at the high side of the station main transformer  
☐ Control voltage at the low side of the station main transformer  
☐ Control voltage at the high side of the station main transformer  
☐ Other options. Please describe if select others

- b. In all the control options selected above, please list the options in which the Unit is able to control its terminal voltage to prevent low/high voltage tripping.

- 11.3 What is the desired control mode from the selected options above? Specify the control plan in this mode. For example: control voltage at which bus to what schedule.

- 12. Wind or inverter-based generating facility Model

*(All model files provided under this section 12 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)*

- i. Power flow model

- i. A \*. RAW file including **aggregated/equivalent** wind or inverter-based generating facility power flow model with appropriate parameters and settings.

***Attach the \*.RAW file and specify the name of the attachment here:***

---

- ii. A \*.RAW file including **detailed** wind or inverter-based generating facility power flow model with appropriate parameters and settings. *(Optional)*

***Attach the \*.RAW file and specify the name of the attachment here:***

---

- ii. Dynamic simulation model

***(Please note that the dynamic model must match the aggregated/equivalent power flow model provided above. Attach the following information for each of the models.)***

- i. Wind or inverter-based generating facility Model \_\_\_\_\_(Please Specify the Manufacturer Model)
- ii. A compiled PSS/E dynamic model for the turbines (a \*.LIB or \*.OBJ file)

***Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:***

---



- iii. A dynamic data file with appropriate parameters and settings for the turbines (typically a \*.DYP file)

***Attach the \*.DYP file and specify the name of the attachment here:***

---

- iv. PSS/E wind or inverter-based generating facility model user manual for the WTG

***Attach and specify the name of the attachment here:***

---

***Repeat the above sections from 6 to 12 for each different wind or inverter-based generating facility model.***

13. Power Plant Controller

Will the wind or inverter-based generating facility be equipped with power plant controller, which has the ability to centrally control the output of the units?

Yes\_\_ No\_\_

If yes, please provide:

- a. Manufacturer model of the power plant controller

---

- b. What are the reactive power control strategy options of the power plant controller?

13.3 Which of the control option stated above is being used in current operation?

---

- c. Is the power plant controller able to control the unit terminal voltages to prevent low/high voltage tripping?

Yes\_\_ No\_\_

Please provide the park controller technical manual from the manufacturer

***Attach the file and specify the name of the attachment here:***

---

14. Station Transformer

Transformer Name		
Nameplate ratings (MVA)		
Total number of the main transformer(s)		
Voltages, High/Low/Tertiary (kV)		
Winding connections, High/Low/Tertiary		
Available tap positions on high voltage side		
Available tap positions on low voltage side		
Will the transformer operate as a LTC?		
Desired voltage control range if LTC		
Tap adjustment time (Tap switching delay + switching time) if LTC		
Desired tap position if applicable		
Tap adjustment time (Tap switching delay + switching time)		
Impedance $Z_1$ , X/R ratio	$Z_{1H-L}$	X/R
	$Z_{1H-T}$	X/R
	$Z_{1T-L}$	X/R
Impedance $Z_0$ , X/R ratio	$Z_{0H-L}$	X/R
	$Z_{0H-T}$	X/R
	$Z_{0T-L}$	X/R

- a. Dynamic Simulation Model for the Power Plant Controller(s) (if applicable )

***(All model files provided under this section 15 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)***

- a. A compiled PSS/E dynamic model for the power plant controller(s) (a \*.LIB or \*.OBJ file)

***Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:***

\_\_\_\_\_

- 15.2 A dynamic data file with appropriate parameters and settings for the power plant controller(s) (typically a \*.DYR file).

***Please set the parameters in accordance with the currently used control mode.***

***Attach the \*.DYP file and specify the name of the attachment here:***

\_\_\_\_\_

15.3 PSS/E model user manual for the power plant controller(s)

***Attach the manual and specify the name of the attachment or specify the name of the attachment here:***\_\_\_\_\_

b. Capacitors and Reactors

Please provide necessary modeling data for all the capacitors and reactors belong to the facility, including: size, basic electrical parameters, connecting bus, switched or fixed, etc.

c. Dynamic Device(s)

***(All model files provided under this section 17 should be compatible with Siemens PTI's PSS/E version currently in use at ISO New England)***

a. Provide necessary modeling data file for all the dynamic devices belong to the facility.

Attach the \*.LIB or \*.OBJ file and specify the name of the attachment here:

\_\_\_\_\_

b. A dynamic data file containing the parameters for the units (typically a \*.DYP file).

Set the parameters in accordance with the desired control mode.

Attach the \*.DYP file and specify the name of the attachment here:

\_\_\_\_\_

d. Collection System/Transformer Tap-Setting Design

Attach a collection system/transformer tap-setting design calculations, consistent with the requirements in the ISO New England Planning Procedures, that identify the calculations to support the proposed tap settings for the unit step-up transformers and the station step-up transformers.

Attach the design document and specify the name of the attachment here:

---

e. Additional Information

Are there any special features available to be implemented to the wind or inverter-based generating facility? Such as weak grid interconnection solutions, etc.

Specify the available features here:

---

***Insert the technical manual for each of the features listed above as objects (display as icons) or specify the name of the attachment here:*** \_\_\_\_\_

f. Provide PSCAD Model and Documentation for the wind or inverter-based generating facility, the Power Plant Controller(s) and Other Dynamic Devices for the wind or inverter-based generating facility.

***ISO will determine how much PSCAD work is needed from the wind or inverter-based generating facility based on its interconnection system conditions.***

## CLUSTER SYSTEM IMPACT STUDY APPLICATION FORM

The undersigned Interconnection Customer submits this form to request the inclusion of the Interconnection Request for its Small Generating Facility in a Cluster Interconnection System Impact Study pursuant to Section 1.5.3.3.2.2 of this SGIP.

To be included in a Cluster Interconnection System Impact Study, the following must be submitted together with this form to the System Operator by the Cluster Entry Deadline:

- a. Project Information:
  - a. Project Name: \_\_\_\_\_
  - b. Queue Position: \_\_\_\_\_
  - c. Is the Interconnection Request contractually associated with another Interconnection Request for an Elective Transmission Upgrade? Yes \_\_\_\_ No \_\_\_\_  
If yes, identify Queue Position of the associated Interconnection Request and provide evidence of the contractual commitment. Queue Position No.: \_\_\_\_\_
- b. Initial Cluster Participation Deposit as specified in Section 1.5.3.3.2.2.

### Applicant Signature

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

**Certification Codes and Standards**

IEEE1547 Standard for Interconnecting Distributed Resources with Electric Power Systems (including use of IEEE 1547.1 testing protocols to establish conformity)

UL 1741 Inverters, Converters, and Controllers for Use in Independent Power Systems

IEEE Std 929-2000 IEEE Recommended Practice for Utility Interface of Photovoltaic (PV) Systems

NFPA 70 (2002), National Electrical Code

IEEE Std C37.90.1-1989 (R1994), IEEE Standard Surge Withstand Capability (SWC) Tests for Protective Relays and Relay Systems

IEEE Std C37.90.2 (1995), IEEE Standard Withstand Capability of Relay Systems to Radiated Electromagnetic Interference from Transceivers

IEEE Std C37.108-1989 (R2002), IEEE Guide for the Protection of Network Transformers

IEEE Std C57.12.44-2000, IEEE Standard Requirements for Secondary Network Protectors

IEEE Std C62.41.2-2002, IEEE Recommended Practice on Characterization of Surges in Low Voltage (1000V and Less) AC Power Circuits

IEEE Std C62.45-1992 (R2002), IEEE Recommended Practice on Surge Testing for Equipment Connected to Low-Voltage (1000V and Less) AC Power Circuits

ANSI C84.1-1995 Electric Power Systems and Equipment – Voltage Ratings (60 Hertz)

IEEE Std 100-2000, IEEE Standard Dictionary of Electrical and Electronic Terms

NEMA MG 1-1998, Motors and Small Resources, Revision 3

IEEE Std 519-1992, IEEE Recommended Practices and Requirements for Harmonic Control in Electrical Power Systems

NEMA MG 1-2003 (Rev 2004), Motors and Generators, Revision 1

**Certification of Small Generator Equipment Packages**

- 1.0 Small Generating Facility equipment proposed for use separately or packaged with other equipment in an interconnection system shall be considered certified for interconnected operation if (1) it has been tested in accordance with industry standards for continuous utility interactive operation in compliance with the appropriate codes and standards referenced below by any Nationally Recognized Testing Laboratory (NRTL) recognized by the United States Occupational Safety and Health Administration to test and certify interconnection equipment pursuant to the relevant codes and standards listed in SGIP Attachment 3, (2) it has been labeled and is publicly listed by such NRTL at the time of the interconnection application, and (3) such NRTL makes readily available for verification all test standards and procedures it utilized in performing such equipment certification, and, with consumer approval, the test data itself. The NRTL may make such information available on its website and by encouraging such information to be included in the manufacturer's literature accompanying the equipment.
- 2.0 The Interconnection Customer must verify that the intended use of the equipment falls within the use or uses for which the equipment was tested, labeled, and listed by the NRTL.
- 3.0 Certified equipment shall not require further type-test review, testing, or additional equipment to meet the requirements of this interconnection procedure; however, nothing herein shall preclude the need for an on-site commissioning test by the parties to the interconnection nor follow-up production testing by the NRTL.
- 4.0 If the certified equipment package includes only interface components (switchgear, inverters, or other interface devices), then an Interconnection Customer must show that the generator or other electric source being utilized with the equipment package is compatible with the equipment package and is consistent with the testing and listing specified for this type of interconnection equipment.
- 5.0 Provided the generator or electric source, when combined with the equipment package, is within the range of capabilities for which it was tested by the NRTL, and does not violate the interface



components' labeling and listing performed by the NRTL, no further design review, testing or additional equipment on the customer side of the point of common coupling shall be required to meet the requirements of this interconnection procedure.

6.0 An equipment package does not include equipment provided by the utility.

7.0 Any equipment package approved and listed in a state by that state's regulatory body for interconnected operation in that state prior to the effective date of these small generator interconnection procedures shall be considered certified under these procedures for use in that state.

**10 kW Inverter Process**

**Solely applicable for Network Resource Interconnection Service**

- 1.0 The Interconnection Customer ("Customer") completes the Interconnection Request ("Application") and submits it to the System Operator.
- 2.0 The System Operator acknowledges to the Customer receipt of the Application within three Business Days of receipt.
- 3.0 The System Operator in conjunction with the Interconnecting Transmission Owner evaluates the Application for completeness and notifies the Customer within ten Business Days of receipt that the Application is or is not complete and, if not, advises what material is missing.
- 4.0 The System Operator in conjunction with the Interconnecting Transmission Owner verifies that the Small Generating Facility can be interconnected safely and reliably using the screens contained in the Fast Track Process in the Small Generator Interconnection Procedures (SGIP). The System Operator has 15 Business Days to complete this process. Unless the System Operator in conjunction with the Interconnecting Transmission Owner determines and demonstrates that the Small Generating Facility cannot be interconnected safely and reliably, the System Operator approves the Application and returns it to the Customer. Note to Customer: Please check with the System Operator before submitting the Application if disconnection equipment is required.
- 5.0 After installation, the Customer returns the Certificate of Completion to the System Operator. Prior to parallel operation, the System Operator and Interconnecting Transmission Owner may inspect the Small Generating Facility for compliance with standards which may include a witness test, and may schedule appropriate metering replacement, if necessary.
- 6.0 The System Operator in conjunction with the Interconnecting Transmission Owner notifies the Customer in writing that interconnection of the Small Generating Facility is authorized. If the witness test is not satisfactory, the Interconnecting Transmission Owner has the right to disconnect the Small Generating Facility. The Customer has no right to operate in parallel until a witness test has been performed, or previously waived on the Application. The Interconnecting Transmission Owner is obligated to complete this witness test within ten Business Days of the receipt of the Certificate of Completion. If the Interconnecting Transmission Owner does not

inspect within ten Business Days or by mutual agreement of the Parties, the witness test is deemed waived.

- 7.0 Contact Information – The Customer must provide the contact information for the legal applicant (i.e., the Interconnection Customer). If another entity is responsible for interfacing with the System Operator and the Interconnecting Transmission Owner, that contact information must be provided on the Application.
- 8.0 Ownership Information – Enter the legal names of the owner(s) of the Small Generating Facility. Include the percentage ownership (if any) by any utility or public utility holding company, or by any entity owned by either.
- 9.0 UL1741 Listed – This standard ("Inverters, Converters, and Controllers for Use in Independent Power Systems") addresses the electrical interconnection design of various forms of generating equipment. Many manufacturers submit their equipment to a Nationally Recognized Testing Laboratory (NRTL) that verifies compliance with UL1741. This "listing" is then marked on the equipment and supporting documentation.

**Application for Interconnecting a Certified Inverter-Based Small Generating Facility No Larger than 10kW**

This Application is considered complete when it provides all applicable and correct information required below. Per SGIP section 1.4, documentation of Site Control must be submitted with the Interconnection Request, except where the Interconnection Request is for a modification to the Interconnection Customer's existing Small Generating Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property. Additional information to evaluate the Application may be required.

Processing Fee

A non-refundable processing fee of \$100 must accompany this Application.

Interconnection Customer

Name: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Contact (if different from Interconnection Customer)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

Owner of the facility (include % ownership by any electric utility): \_\_\_\_\_

### Small Generating Facility Information

Location (if different from above): \_\_\_\_\_

Electric Service Company: \_\_\_\_\_

Account Number: \_\_\_\_\_

Is the Interconnection Request for:

A retail customer interconnecting a new Small Generating Facility that will produce electric energy to be consumed only on the retail customer's site? Yes \_\_\_\_\_ No \_\_\_\_\_

A Qualifying Facility where 100% of the output will be sold to its host utility?

Yes \_\_\_\_\_ No \_\_\_\_\_

An Interconnection Customer interconnecting a new Small Generating Facility that plans to participate in the wholesale markets? Yes \_\_\_\_\_ No \_\_\_\_\_

An existing Small Generating Facility commencing participation in the wholesale markets?

Yes \_\_\_\_\_ No \_\_\_\_\_

Inverter Manufacturer: \_\_\_\_\_ Model \_\_\_\_\_

Nameplate Rating: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA) \_\_\_\_\_ (AC Volts)

Single Phase \_\_\_\_\_ Three Phase \_\_\_\_\_

System Design Capacity: \_\_\_\_\_ (kW) \_\_\_\_\_ (kVA)

Prime Mover: Photovoltaic ☐ Reciprocating Engine ☐ Fuel Cell ☐

Turbine ☐ Other \_\_\_\_\_

Energy Source: Solar ☐ Wind ☐ Hydro ☐ Diesel ☐ Natural Gas ☐

Fuel Oil ☐ Other (describe) \_\_\_\_\_

Is the equipment UL1741 Listed? Yes \_\_\_\_\_ No \_\_\_\_\_

If Yes, attach manufacturer's cut-sheet showing UL1741 listing

Estimated Installation Date: \_\_\_\_\_ Estimated In-Service Date: \_\_\_\_\_

The 10 kW Inverter Process is available only for inverter-based Small Generating Facilities no larger than 10 kW that meet the codes, standards, and certification requirements of Attachments 3 and 4 of the Small Generator Interconnection Procedures (SGIP), or the Interconnecting Transmission Owner has reviewed the design or tested the proposed Small Generating Facility and is satisfied that it is safe to operate.

List components of the Small Generating Facility equipment package that are currently certified:

Equipment Type	Certifying Entity
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____

**Interconnection Customer Signature**

I hereby certify that, to the best of my knowledge, the information provided in this Application is true. I agree to abide by the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return the Certificate of Completion when the Small Generating Facility has been installed.

Signed: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

**Contingent Approval to Interconnect the Small Generating Facility  
(For Internal use only)**

Interconnection of the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW and return of the Certificate of Completion.

Interconnecting Transmission Owner Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Application ID number: \_\_\_\_\_

Interconnecting Transmission Owner waives inspection/witness test? Yes\_\_\_No\_\_\_

System Operator Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

Application ID number: \_\_\_\_\_

## Small Generating Facility Certificate of Completion

Is the Small Generating Facility owner-installed? Yes \_\_\_\_\_ No \_\_\_\_\_

Interconnection Customer: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

Location of the Small Generating Facility (if different from above):

\_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

### Electrician:

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone (Day): \_\_\_\_\_ (Evening): \_\_\_\_\_

Fax: \_\_\_\_\_ E-Mail Address: \_\_\_\_\_

License number: \_\_\_\_\_

Date Approval to Install Facility granted by the Interconnecting Transmission Owner: \_\_\_\_\_

Application ID number: \_\_\_\_\_

### Inspection:

The Small Generating Facility has been installed and inspected in compliance with the local building/electrical code of \_\_\_\_\_

Signed (Local electrical wiring inspector, or attach signed electrical inspection):

\_\_\_\_\_

Print Name: \_\_\_\_\_

Date: \_\_\_\_\_

As a condition of interconnection, you are required to send/fax a copy of this form along with a copy of the signed electrical permit to (insert System Operator and Interconnecting Transmission Owner information below):

Name: \_\_\_\_\_

System Operator: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Fax: \_\_\_\_\_

Name: \_\_\_\_\_

Interconnecting Transmission Owner:

\_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

City, State ZIP: \_\_\_\_\_

Fax: \_\_\_\_\_

---

### **Approval to Energize the Small Generating Facility**

**(For Internal use only)**

Energizing the Small Generating Facility is approved contingent upon the Terms and Conditions for Interconnecting an Inverter-Based Small Generating Facility No Larger than 10kW

Interconnecting Transmission Owner Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_

System Operator Signature: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_



**Terms and Conditions for Interconnecting an Inverter-Based  
Small Generating Facility No Larger than 10kW**

**1.0 Construction of the Facility**

The Interconnection Customer (the "Customer") may proceed to construct (including operational testing not to exceed two hours) the Small Generating Facility when the System Operator approves the Interconnection Request (the "Application") and returns it to the Customer.

**2.0 Interconnection and Operation**

The Customer may operate Small Generating Facility and interconnect with the Interconnecting Transmission Owner's (the "Company") electric system once all of the following have occurred:

2.1 Upon completing construction, the Customer will cause the Small Generating Facility to be inspected or otherwise certified by the appropriate local electrical wiring inspector with jurisdiction, and

2.2 The Customer returns the Certificate of Completion to the System Operator and the Company, and

2.3 The Company has either:

2.3.1 Completed its inspection of the Small Generating Facility to ensure that all equipment has been appropriately installed and that all electrical connections have been made in accordance with applicable codes. All inspections must be conducted by the Company, at its own expense, within ten Business Days after receipt of the Certificate of Completion and shall take place at a time agreeable to the Parties. The Company shall provide a written statement that the Small Generating Facility has passed inspection or shall notify the Customer of what steps it must take to pass inspection as soon as practicable after the inspection takes place; or

2.3.2 If the Company does not schedule an inspection of the Small Generating Facility within ten business days after receiving the Certificate of Completion, the witness test is deemed waived (unless the Parties agree otherwise); or

2.3.3 The Company waives the right to inspect the Small Generating Facility.

2.4 The Company has the right to disconnect the Small Generating Facility in the event of improper installation or failure to return the Certificate of Completion.

2.5 Revenue quality metering equipment must be installed and tested in accordance with applicable ANSI standards.

### 3.0 **Safe Operations and Maintenance**

The Customer shall be fully responsible to operate, maintain, and repair the Small Generating Facility as required to ensure that it complies at all times with the interconnection standards to which it has been certified.

### 4.0 **Access**

The Company shall have access to the disconnect switch (if the disconnect switch is required) and metering equipment of the Small Generating Facility at all times. The Company shall provide reasonable notice to the Customer when possible prior to using its right of access.

### 5.0 **Disconnection**

The Company may temporarily disconnect the Small Generating Facility upon the following conditions:

5.1 For scheduled outages upon reasonable notice.

5.2 For unscheduled outages or emergency conditions.

5.3 If the Small Generating Facility does not operate in the manner consistent with these Terms and Conditions.

5.4 The Company shall inform the Customer in advance of any scheduled disconnection, or as is reasonable after an unscheduled disconnection.

### 6.0 **Indemnification**

The Parties shall at all times indemnify, defend, and save the other Party harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's action or inactions of its obligations under this agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

## **7.0 Insurance**

The Parties agree to follow all applicable insurance requirements imposed by the state in which the Point of Interconnection is located. All insurance policies must be maintained with insurers authorized to do business in that state.

## **8.0 Limitation of Liability**

Each party's liability to the other party for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall either party be liable to the other party for any indirect, incidental, special, consequential, or punitive damages of any kind whatsoever, except as allowed under paragraph 6.0.

## **9.0 Termination**

The agreement to operate in parallel may be terminated under the following conditions:

9.1 By the Customer

9.2 By providing written notice to the Company and the System Operator.

9.3 By the Company or the System Operator

9.4 If the Small Generating Facility fails to operate for any consecutive 12 month period or the Customer fails to remedy a violation of these Terms and Conditions.

## **10.0 Permanent Disconnection**

In the event this Agreement is terminated, the Company shall have the right to disconnect its facilities or direct the Customer to disconnect its Small Generating Facility.

## **11.0 Survival Rights**

This Agreement shall continue in effect after termination to the extent necessary to allow or require any Party to fulfill rights or obligations that arose under the Agreement.

## **12. Assignment/Transfer of Ownership of the Facility**

This Agreement shall survive the transfer of ownership of the Small Generating Facility to a new owner when the new owner agrees in writing to comply with the terms of this Agreement and so notifies the System Operator and the Company.

### Interconnection Feasibility Study Agreement

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_ existing under the laws of the State of \_\_\_\_\_, ("Interconnecting Transmission Owner"). Interconnection Customer, System Operator and Interconnecting Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."

### RECITALS

**WHEREAS**, Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Small Generating Facility with the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has requested the System Operator and Interconnecting Transmission Owner to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Small Generating Facility with the facilities that are part of the Interconnecting Transmission Owner's Administered Transmission System, and of any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures ("SGIP"), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the "Tariff").

- 2.0 The Interconnection Customer elects and the System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection Feasibility Study consistent the standard Small Generator Interconnection Procedures in accordance with the Open Access Transmission Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by the Interconnection Customer in the Interconnection Request, as may be modified as the result of the scoping meeting. The System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with the standard Small Generator Interconnection Procedures. If the Interconnection Customer modifies its Interconnection Request, the time to complete the Interconnection Feasibility Study may be extended by agreement of the Parties.
- 5.0 In performing the study, the System Operator and Interconnecting Transmission Owner shall rely, to the extent reasonably practicable, on existing studies of recent vintage. The Interconnection Customer shall not be charged for such existing studies; however, the Interconnection Customer shall be responsible for charges associated with any new study or modifications to existing studies that are reasonably necessary to perform the Interconnection Feasibility Study.
- 6.0 The Interconnection Feasibility Study report shall provide the following analyses depending on whether the Feasibility Study consisted of: (a) a power flow, including thermal analysis and voltage analysis, and short circulated analysis, or (b) limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the interconnection of the Small Generating Facility as proposed given recent study experience and as discussed at the Scoping Meeting:
  - 6.1 Initial identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection, or, findings of the limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most

significant for the proposed Small Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting;

- 6.2 Initial identification of any thermal overload or voltage limit violations resulting from the interconnection, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Small Generating Facility's interconnection given recent study experience and as discussed at the Scoping Meeting;
  - 6.3 Preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Small Generating Facility as identified within the scope of the analysis performed as part of the study;
  - 6.4 If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, initial review of grounding requirements and electric system protection;
  - 6.5 If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, description and non-binding estimated cost of facilities required to interconnect the proposed Small Generating Facility and to address the identified short circuit and power flow issues and length of time that would be necessary to construct the facilities; and
  - 6.6 To the extent the Interconnection Customer requested a preliminary analysis as described in Section 3.3.2 of the SGIP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Generating Facility to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.
- 7.0 The Interconnection Feasibility Study shall model the impact of the Small Generating Facility regardless of purpose in order to avoid the further expense and interruption of operation for reexamination of feasibility and impacts if the Interconnection Customer later changes the purpose for which the Small Generating Facility is being installed.
  - 8.0 The study shall include the feasibility of any interconnection at a proposed project site where there could be multiple potential Points of Interconnection, as requested by the Interconnection Customer and at the Interconnection Customer's cost.

- 9.0 A deposit, paid to the System Operator, of the lesser of 50 percent of good faith estimated Interconnection Feasibility Study costs or earnest money of \$1,000 shall be required from the Interconnection Customer.
- 10.0 Once the Interconnection Feasibility Study is completed, an Interconnection Feasibility Study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the Interconnection Feasibility Study must be completed and the Interconnection Feasibility Study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct an Interconnection Feasibility Study.
- 11.0 The total estimated cost of the performance of the Interconnection Feasibility Study consists of \$ [insert], which is comprised of the System Operator's cost of \$[insert] and the Interconnecting Transmission Owner's cost of \$[insert]. The Interconnection Customer may be invoiced on a monthly basis for work to be conducted. 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator shall refund such excess within 30 calendar days of the invoice without interest.
- 12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days of receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator shall refund such excess within 30 calendar days of the invoice without interest
- 13.0 Miscellaneous.
- 13.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.
- 13.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Feasibility Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or

participating in the Interconnection Feasibility Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Feasibility Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Feasibility Study, the content of the Interconnection Feasibility Study, or the conclusions of the Interconnection Feasibility Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 13.3 Force Majeure, Liability and Indemnification.

13.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all Reasonable Efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

13.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or



omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 13.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be

reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 13.4 Third-Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns. Notwithstanding the foregoing, and without limitation of Sections 13.2 and 13.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Feasibility Study shall not be deemed third party beneficiaries of Sections 13.2 and 13.3.
- 13.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.5, shall continue in effect for a term of one year or until the Interconnection Feasibility Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 1.8 of the SGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 13.6 Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

- 13.7 Severability. If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority: (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of this Agreement shall remain in full force and effect.
- 13.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 13.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 13.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.11 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 13.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect. Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the System Operator and the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.
- 13.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each

and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.

13.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

13.15 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

13.15.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the System Operator or Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

13.15.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

13.16 Reservation of Rights. Subject to the TOA, the System Operator and the Interconnecting Transmission Owner shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates,

terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of System Operator]**

**[Insert name of Interconnection Customer]**

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

**[Insert name of Interconnecting Transmission Owner]\**

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

**Attachment A to  
Interconnection Feasibility Study Agreement**

**Assumptions Used in Conducting the Interconnection Feasibility Study**

The Interconnection Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the scoping meeting held on \_\_\_\_\_:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
  
  
  
  
  
  
  
  
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer, System Operator and Interconnecting Transmission Owner.

**Interconnection System Impact Study Agreement**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_  
20\_\_ by and between \_\_\_\_\_,  
a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_, ("Interconnection Customer,") and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_ existing under the laws of the State of \_\_\_\_\_, ("Interconnecting Transmission Owner"). Interconnection Customer, System Operator and Interconnecting Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generating Facility or generating capacity addition to an existing Small Generating Facility consistent with the Interconnection Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generating Facility with the Administered Transmission System;

**WHEREAS**, the System Operator and Interconnecting Transmission Owner have completed an Interconnection Feasibility Study and provided the results of said study to the Interconnection Customer (This recital to be omitted if the Parties have agreed to forego the Interconnection Feasibility Study.); and

**WHEREAS**, the Interconnection Customer has requested the System Operator and Interconnecting Transmission Owner to perform an Interconnection System Impact Study(s) to assess the impact of interconnecting the Small Generating Facility with the facilities that are part of the Interconnecting Transmission Owner's Administered Transmission System, and of any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the



Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures.
- 2.0 The Interconnection Customer elects and the System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection System Impact Study(s) consistent with the standard Small Generator Interconnection Procedures in accordance with the Open Access Transmission Tariff.
- 3.0 The scope of an Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 An Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by Interconnection Customer in the Interconnection Request. The System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 An Interconnection System Impact Study shall consist of a short circuit analysis, a stability analysis, a power flow analysis, voltage drop and flicker studies, protection and set point coordination studies, and grounding reviews, as necessary. An Interconnection System Impact Study shall state the assumptions upon which it is based, state the results of the analyses, and provide the requirement or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. An Interconnection System Impact Study shall provide a list of facilities that are required as a result of the Interconnection Request and non-binding good faith estimates of cost responsibility and time to construct.

- 6.0 A distribution Interconnection System Impact Study shall incorporate a distribution load flow study, an analysis of equipment interrupting ratings, protection coordination study, voltage drop and flicker studies, protection and set point coordination studies, grounding reviews, and the impact on electric system operation, as necessary.
- 7.0 Affected Systems may participate in the preparation of an Interconnection System Impact Study, with a division of costs among such entities as they may agree. All Affected Systems shall be afforded an opportunity to review and comment upon an Interconnection System Impact Study that covers potential adverse system impacts on their electric systems, and the System Operator and Interconnecting Transmission Owner have 20 additional Business Days to complete an Interconnection System Impact Study requiring review by Affected Systems.
- 8.0 If the System Operator uses a queuing procedure for sorting or prioritizing projects and their associated cost responsibilities for any required Network Upgrades, the Interconnection System Impact Study shall consider all generating facilities (and with respect to paragraph 8.3 below, any identified Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced.
- 8.1 Are directly interconnected with the Administered Transmission System; or
- 8.2 Are interconnected with Affected Systems and may have an impact on the proposed interconnection; and
- 8.3 Have a pending higher queued Interconnection Request to interconnect with the Administered Transmission System.
- 9.0 A distribution Interconnection System Impact Study, if required, shall be completed and the results transmitted to the Interconnection Customer within 30 Business Days after this Agreement is signed by the Parties. A transmission Interconnection System Impact Study, if required, shall be completed and the results transmitted to the Interconnection Customer within 45 Business Days after this Agreement is signed by the Parties.
- 10.0 A deposit of the equivalent of the good faith estimated cost of a distribution Interconnection System Impact Study shall be paid to the System Operator by the Interconnection Customer; and

the one half the good faith estimated cost of a transmission Interconnection System Impact Study shall be paid to the System Operator by the Interconnection Customer.

11.0 The total estimated cost of the performance of the Interconnection System Impact Study consists of \$[insert], which is comprised of the System Operator's cost of \$[insert] and the Interconnecting Transmission Owner's cost of \$[insert]. The Interconnection Customer may be invoiced on a monthly basis for work to be conducted.

12.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator or Interconnecting Transmission Owner, as applicable, shall refund such excess within 30 calendar days of the invoice without interest.

13.0 Miscellaneous.

13.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

a) Disclaimer of Warranty. In preparing and/or participating in the Interconnection System Impact Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection System Impact Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection System Impact Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection System Impact Study, the content of the Interconnection System Impact Study, or the conclusions of the Interconnection System

Impact Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

b) Force Majeure, Liability and Indemnification.

13.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all Reasonable Efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

13.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other

liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 13.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement ("TOA") or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 13.4 Third-Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns. Notwithstanding the foregoing, and without limitation of Sections 13.2 and 13.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection System Impact Study shall not be deemed third party beneficiaries of Sections 13.2 and 13.3.
- 13.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 13.5, shall continue in effect for a term of one year or until the Interconnection System Impact Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 1.8 of the SGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 13.6 Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 13.7 Severability. If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority: (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of this Agreement shall remain in full force and effect.
- 13.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.

- 13.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 13.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 13.11 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 13.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect. Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the System Operator and the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.
- 13.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 13.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a

third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

- 13.15 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.

13.15.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the System Operator or Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

13.15.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

- 13.16 Reservation of Rights. Subject to the TO Agreement, the System Operator and the Interconnecting Transmission Owner shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the



Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS THEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of System Operator]      [Insert name of Interconnection Customer]**

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

**[Insert name of Interconnecting Transmission Owner]**

\_\_\_\_\_  
Signed \_\_\_\_\_

Name (Printed):

\_\_\_\_\_  
Title \_\_\_\_\_

**Attachment A to System  
Impact Study Agreement**

**Assumptions Used in Conducting the System Impact Study**

The Interconnection System Impact Study shall be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with the standard Small Generator Interconnection Procedures, and the following assumptions:

- 1) Designation of Point of Interconnection and configuration to be studied.
  
  
  
  
  
  
  
  
  
  
- 2) Designation of alternative Points of Interconnection and configuration.

1) and 2) are to be completed by the Interconnection Customer. Other assumptions (listed below) are to be provided by the Interconnection Customer, System Operator and Interconnecting Transmission Owner.

**Interconnection Facilities Study Agreement**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_  
20\_\_ by and between \_\_\_\_\_,  
a \_\_\_\_\_ organized and existing under the laws of the State of  
\_\_\_\_\_, ("Interconnection Customer,") and ISO New  
England Inc., a non-stock corporation existing under the laws of the State of Delaware ("System  
Operator"), and  
\_\_\_\_\_, a \_\_\_\_\_  
existing under the laws of the State of \_\_\_\_\_,  
("Interconnecting Transmission Owner"). Interconnection Customer, System Operator and  
Interconnecting Transmission Owner each may be referred to as a "Party," or collectively as the "Parties."

**RECITALS**

**WHEREAS**, the Interconnection Customer is proposing to develop a Small Generating Facility or  
generating capacity addition to an existing Small Generating Facility consistent with the Interconnection  
Request completed by the Interconnection Customer on \_\_\_\_\_; and

**WHEREAS**, the Interconnection Customer desires to interconnect the Small Generating Facility with the  
Administered Transmission System;

**WHEREAS**, the System Operator and Interconnecting Transmission Owner have completed an  
Interconnection System Impact Study and provided the results of said study to the Interconnection  
Customer; and

**WHEREAS**, the Interconnection Customer has requested the System Operator and Interconnecting  
Transmission Owner to perform an Interconnection Facilities Study to specify and estimate the cost of the  
equipment, engineering, procurement and construction work needed to implement the conclusions of the  
Interconnection System Impact Study in accordance with Good Utility Practice to physically and  
electrically connect the Small Generating Facility with the facilities that are part of the Interconnecting  
Transmission Owner's Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated or the meanings specified in the standard Small Generator Interconnection Procedures, or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 The Interconnection Customer elects and the System Operator and Interconnecting Transmission Owner shall cause an Interconnection Facilities Study consistent with the standard Small Generator Interconnection Procedures to be performed in accordance with the Open Access Transmission Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to data provided in Attachment A to this Agreement.
- 4.0 The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work (including overheads) needed to implement the conclusions of the Interconnection System Impact Study(s). The Interconnection Facilities Study shall also identify (1) the electrical switching configuration of the equipment, including, without limitation, transformer, switchgear, meters, and other station equipment, (2) the nature and estimated cost of the Interconnecting Transmission Owner’s Interconnection Facilities and Upgrades necessary to accomplish the interconnection, and (3) an estimate of the time required to complete the construction and installation of such facilities.
- 5.0 The System Operator and Interconnecting Transmission Owner may propose to group facilities required for more than one Interconnection Customer in order to minimize facilities costs through economies of scale, but any Interconnection Customer may require the installation of facilities required for its own Small Generating Facility if it is willing to pay the costs of those facilities.
- 6.0 A deposit, paid to the System Operator, of the good faith estimated Interconnection Facilities Study costs shall be required from the Interconnection Customer.
- 7.0 In cases where Upgrades are required, the Interconnection Facilities Study must be completed within 45 Business Days of the receipt of this Agreement. In cases where no Upgrades are necessary, and the required facilities are limited to Interconnection Facilities, the Interconnection Facilities Study must be completed within 30 Business Days.

- 8.0 Once the Interconnection Facilities Study is completed, an Interconnection Facilities Study report shall be prepared and transmitted to the Interconnection Customer. Barring unusual circumstances, the Interconnection Facilities Study must be completed and the Interconnection Facilities Study report transmitted within 30 Business Days of the Interconnection Customer's agreement to conduct an Interconnection Facilities Study.
- 9.0 The total estimated cost of the performance of the Interconnection Facility Study consists of \$ [insert], which is comprised of the System Operator's cost of \$[insert] and the Interconnecting Transmission Owner's cost of \$[insert]. The Interconnection Customer may be invoiced on a monthly basis for work to be conducted.
- 10.0 The Interconnection Customer must pay any study costs that exceed the deposit without interest within 30 calendar days on receipt of the invoice or resolution of any dispute. If the deposit exceeds the invoiced fees, the System Operator or Interconnecting Transmission Owner, as applicable, shall refund such excess within 30 calendar days of the invoice without interest.
- 11.0 Miscellaneous.
- 11.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.
- 11.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Facilities Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Facilities Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Facilities Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of

law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Facilities Study, the content of the Interconnection Facilities Study, or the conclusions of the Interconnection Facilities Study.

Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

a) Force Majeure, Liability and Indemnification.

11.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all Reasonable Efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

11.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System

Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 11.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting



Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 11.4 Third-Party Beneficiaries. This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns. Notwithstanding the foregoing, and without limitation of Sections 11.2 and 11.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Facilities Study shall not be deemed third party beneficiaries of Sections 11.2 and 11.3.
- 11.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 11.5, shall continue in effect for a term of one year or until the Interconnection Facilities Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 1.8 of the SGIP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 11.6 Governing Law, Regulatory Authority, and Rules. The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.
- 11.7 Severability. If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority: (1) such portion or provision shall be deemed separate and independent; (2) the Parties shall negotiate in good faith to restore

insofar as practicable the benefits to each Party that were affected by such ruling; and (3) the remainder of this Agreement shall remain in full force and effect.

- 11.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 11.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 11.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 11.11 No Partnership. This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon either Party. Neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.
- 11.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect. Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the System Operator and the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.
- 11.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.

- 11.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.
- 11.15 Subcontractors. Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Parties for the performance of such subcontractor.
- 11.15.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Parties for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the System Operator or Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.
- 11.15.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.
- 11.16 Reservation of Rights. Subject to the TOA, the System Operator and the Interconnecting Transmission Owner shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party and to participate

fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

**[Insert name of System Operator]      [Insert name of Interconnection Customer]**

_____	_____
Signed _____	Signed _____
Name (Printed): _____	Name (Printed): _____
_____	_____
Title _____	Title _____

**[Insert name of Interconnecting Transmission Owner]**

\_\_\_\_\_

Signed \_\_\_\_\_

Name (Printed): \_\_\_\_\_

\_\_\_\_\_

Title \_\_\_\_\_

**Attachment A to  
Interconnection Facilities Study Agreement**

**Data to Be Provided by the Interconnection Customer  
with the Interconnection Facilities Study Agreement**

Provide location plan and simplified one-line diagram of the plant and station facilities. For staged projects, please indicate future generation, transmission circuits, etc.

On the one-line diagram, indicate the generation capacity attached at each metering location.  
(Maximum load on Current Transformer/Power Transformer ("CT/PT"))

On the one-line diagram, indicate the location of auxiliary power. (Minimum load on CT/PT)  
Amps

One set of metering is required for each generation connection to the new ring bus or existing Transmission Provider station. Number of generation connections: \_\_\_\_\_

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes \_\_\_\_ No \_\_\_\_

Will a transfer bus on the generation side of the metering require that each meter set be designed for the total plant generation? Yes \_\_\_\_ No \_\_\_\_

(Please indicate on the one-line diagram).

What type of control system or Power Line Carrier ("PLC") will be located at the Small Generating Facility?

---

---

What protocol does the control system or PLC use?

---

---

Please provide a 7.5-minute quadrangle map of the site. Indicate the plant, station, transmission line, and property lines.

Physical dimensions of the proposed interconnection station:

---

Bus length from generation to interconnection station:

---

Line length from interconnection station to Administered Transmission System.

---

Tower number observed in the field. (Painted on tower leg)\*:

---

Number of third party easements required for transmission lines\*:

---

\* To be completed in coordination with Transmission Provider.

Is the Small Generating Facility located in Transmission Provider's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ If No, please provide name of local provider:

---

Please provide the following proposed schedule dates:

Begin Construction Date: \_\_\_\_\_

Generator step-up transformers  
receive back feed power Date: \_\_\_\_\_

Generation Testing Date: \_\_\_\_\_

Commercial Operation Date: \_\_\_\_\_

**STANDARD SMALL GENERATOR  
INTERCONNECTION AGREEMENT (SGIA)**



## **TABLE OF CONTENTS**

### **Article. 1. Scope and Limitations of Agreement**

- 1.1 Applicability
- 1.2 Purpose
- 1.3 No Agreement to Purchase or Deliver Power
- 1.4 Limitations
- 1.5 Responsibilities of the Parties
- 1.6 Parallel Operation Obligations
- 1.7 Metering
- 1.8 Reactive Power and Primary Frequency Response
- 1.9 Capitalized Term
- 1.10 Scope of Service

### **Article. 2. Inspection, Testing, Authorization, and Right of Access**

- 2.1 Equipment Testing and Inspection
- 2.2 Authorization Required Prior to Parallel Operation
- 2.3 Right of Access

### **Article. 3. Effective Date, Term, Termination, and Disconnection**

- 3.1 Effective Date
- 3.2 Term of Agreement
- 3.3 Termination
- 3.4 Temporary Disconnection
  - 3.4.1 Emergency Conditions
  - 3.4.2 Routine Maintenance, Construction, and Repair
  - 3.4.3 Forced Outages
  - 3.4.4 Adverse Operating Effects
  - 3.4.5 Modification of the Small Generating Facility
  - 3.4.6 Reconnection

### **Article. 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

- 4.1 Interconnection Facilities
- 4.2 Distribution Upgrades

### **Article. 5. Cost Responsibility for Network Upgrades**

- 5.1 Applicability
- 5.2 Network Upgrades

- 5.3 Special Provisions for Affected Systems
- 5.4 Rights Under Other Agreements

**Article.6. Billing, Payment, Milestones, and Financial Security**

- 6.1 Billing and Payment Procedures and Final Accounting
- 6.2 Milestones
- 6.3 Financial Security Arrangements

**Article. 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

- 7.1 Assignment
- 7.2 Limitation of Liability
- 7.3 Indemnity
- 7.4 Consequential Damages
- 7.5 Force Majeure
- 7.6 Default

**Article. 8. Insurance Requirements**

- 8.1 General Liability
- 8.2 Insurer Requirements and Endorsements
- 8.3 Evidence of Insurance
- 8.4 Self Insurance
- 8.5 Interconnecting Transmission Owner Insurance

**Article. 9. Confidentiality**

**Article. 10. Disputes**

**Article. 11. Taxes**

**Article. 12. Miscellaneous**

- 12.1 Governing Law, Regulatory Authority, and Rules
- 12.2 Amendment
- 12.3 No Third-Party Beneficiaries
- 12.4 Waiver
- 12.5 Entire Agreement
- 12.6 Multiple Counterparts
- 12.7 No Partnership
- 12.8 Severability
- 12.9 Security Arrangements
- 12.10 Environmental Releases
- 12.11 Subcontractors

12.12 Reservation of Rights

**Article. 13. Notices**

13.1 General

13.2 Billing and Payment

13.3 Alternative Forms of Notice

13.4 Designated Operating Representative

13.5 Changes to the Notice Information

**Article. 14. Signatures**

Attachments to SGIA

Attachment 1 – Glossary of Terms

Attachment 2 – Description and Costs of the Small Generating Facility, Interconnection Facilities, and  
Metering Equipment

Attachment 3 – One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities,  
Metering Equipment, and Upgrades

Attachment 4 – Milestones

Attachment 5 – Additional Operating Requirements for the New England Transmission System and  
Affected Systems Needed to Support the Interconnection Customer's Needs

Attachment 6 – Interconnecting Transmission Owner's Description of its Upgrades and Best Estimate of  
Upgrade Costs

Attachment 7 – Commercial Operation Date

**THIS STANDARD SMALL GENERATOR INTERCONNECTION AGREEMENT ("Agreement")**

is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnection Customer" with a Small Generating Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware ("System Operator"), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ ("Interconnecting Transmission Owner"). Under this Agreement the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a "Party" or collectively as the "Parties."

In consideration of the mutual covenants set forth herein, the Parties agree as follows

**Article 1. Scope and Limitations of Agreement**

**1.1 Applicability:**

This Agreement shall be used for all Interconnection Requests submitted under the Small Generator Interconnection Procedures (SGIP) except for those submitted under the 10 kW Inverter Process contained in SGIP Attachment 5.

**1.2 Purpose**

This Agreement governs the terms and conditions under which the Interconnection Customer's Small Generating Facility will interconnect with, and operate in parallel with, the Interconnecting Transmission Owner's facilities that are part of the Administered Transmission System.

**1.3 No Agreement to Purchase or Deliver Power**

This Agreement does not constitute an agreement to purchase or deliver the Interconnection Customer's power. The purchase or delivery of power and other services that the Interconnection Customer may require will be covered under separate agreements, if any. The Interconnection Customer will be responsible for separately making all necessary arrangements (including scheduling) for delivery of electricity with the applicable Party.

#### 1.4 Limitations

Nothing in this Agreement is intended to affect any other agreement between the Parties.

#### 1.5 Responsibilities of the Parties

- 1.5.1 The Parties shall perform all obligations of this Agreement in accordance with all Applicable Laws and Regulations, Operating Requirements, and Good Utility Practice.
- 1.5.2 The Interconnection Customer shall construct, interconnect, operate and maintain its Small Generating Facility and construct, operate, and maintain its Interconnection Facilities in accordance with the applicable manufacturer's recommended maintenance schedule, and in accordance with this Agreement, and with Good Utility Practice.
- 1.5.3 The Interconnecting Transmission Owner shall construct, operate, and maintain its transmission facilities and Interconnection Facilities in accordance with this Agreement, and with Good Utility Practice.
- 1.5.4 The Interconnection Customer agrees to construct its facilities or systems in accordance with applicable specifications that meet or exceed those provided by the National Electrical Safety Code, the American National Standards Institute, IEEE, Underwriter's Laboratory, and Operating Requirements in effect at the time of construction and other applicable national and state codes and standards. The Interconnection Customer agrees to design, install, maintain, and operate its Small Generating Facility so as to reasonably minimize the likelihood of a disturbance adversely affecting or impairing the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems.
- 1.5.5 Each Party shall operate, maintain, repair, and inspect, and shall be fully responsible for the facilities that it now or subsequently may own unless otherwise specified in the Attachments to this Agreement. Each Party shall be responsible for the safe installation, maintenance, repair and condition of their respective lines and appurtenances on their respective sides of the point of change of ownership. The Interconnecting Transmission Owner and the Interconnection Customer, as appropriate, shall provide Interconnection

Facilities that adequately protect the New England Transmission System [or Interconnecting Transmission Owner's transmission facilities], personnel, and other persons from damage and injury. The allocation of responsibility for the design, installation, operation, maintenance and ownership of Interconnection Facilities shall be delineated in the Attachments to this Agreement.

- 1.5.6 The System Operator, with input from the Interconnecting Transmission Owner, shall coordinate with all Affected Systems to support the interconnection.
- 1.5.7 The Interconnection Customer shall ensure "frequency ride through" capability and "voltage ride through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems for a defined under-frequency or over-frequency condition, or an under-voltage or over-voltage condition, as tested pursuant to Article 2.1 of this Agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis. The Small Generating Facility's protective equipment settings shall comply with the Interconnecting Transmission Owner's automatic load-shed program. The System Operator and Interconnecting Transmission Owner shall review the protective equipment settings to confirm compliance with the automatic load-shed program. The term "ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems during system disturbances within a range of conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis. The term "frequency ride through" as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems during system disturbances within a range of under-frequency and over-frequency conditions, in accordance with Good Utility Practice and consistent with any standards

and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis. The term “voltage ride through” as used herein shall mean the ability of a Small Generating Facility to stay connected to and synchronized with the system or equipment of the Interconnecting Transmission Owner, the New England Transmission System and any Affected Systems during system disturbances within a range of under-voltage and over-voltage conditions, in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the New England Control Area on a comparable basis.

#### 1.6 Parallel Operation Obligations

Once the Small Generating Facility has been authorized to commence parallel operation, the Interconnection Customer shall abide by all rules and procedures pertaining to the parallel operation of the Small Generating Facility in the applicable control area, including, but not limited to the ISO New England Operating Documents, and the Operating Requirements set forth in Attachment 5 of this Agreement.

#### 1.7 Metering

The Interconnection Customer shall be responsible for the Interconnecting Transmission Owner’s reasonable and necessary cost for the purchase, installation, operation, maintenance, testing, repair, and replacement of metering and data acquisition equipment specified in Attachment 2 of this Agreement. The Interconnection Customer's metering (and data acquisition, as required) equipment shall conform to applicable industry rules and Operating Requirements.

#### 1.8 Reactive Power and Primary Frequency Response

##### 1.8.1 Power Factor Design Criteria

1.8.1.1 Synchronous Generation. The Interconnection Customer shall design its Small Generating Facility to maintain a composite power delivery at continuous rated power output at the Point of Interconnection with dynamic reactive capability over the power factor range of 0.95 leading to 0.95 lagging, unless the System Operator or Interconnecting Transmission Owner has established different

requirements that apply to all similarly situated synchronous (and non-wind non-synchronous generators as specified in Appendix G, Section A.ii.4, to the LGIA) generators on a comparable basis and in accordance with Operating Requirements.

1.8.1.2 Non-Synchronous Generation. Generating Facilities shall be subject to the power factor design criteria specified in Appendix G to the LGIA. Wind and inverter-based Generating Facilities shall be subject to the Low Voltage Ride-Through Capability requirements specified in Appendix G to the LGIA.

1.8.2 Interconnection Customers shall be compensated for reactive power service in accordance with Schedule 2 of the Tariff.

1.8.3 Primary Frequency Response

Interconnection Customer with an Interconnection System Impact Study that commenced before May 15, 2018 is obligated to provide and maintain a functioning governor on all generating units comprising the Small Generating Facility in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnection Customer with an Interconnection System Impact Study that commenced on or after May 15, 2018 shall ensure the primary frequency response capability of its Small Generating Facility by installing, maintaining, and operating a functioning governor or equivalent controls. The term “functioning governor or equivalent controls” as used herein shall mean the required hardware and/or software that provides frequency responsive real power control with the ability to sense changes in system frequency and autonomously adjust the Small Generating Facility’s real power output in accordance with the droop and deadband parameters and in the direction needed to correct frequency deviations. Interconnection Customer is required to install a governor or equivalent controls with the capability of operating: (1) with a maximum 5 percent droop and  $\pm 0.036$  Hz deadband; or (2) in accordance with the relevant droop, deadband, and timely and sustained response settings from an approved NERC Reliability Standard providing for equivalent or more stringent parameters. The droop characteristic shall be: (1) based on the nameplate capacity of the Small Generating Facility, and shall be linear in the range of frequencies between 59 to 61 Hz that are outside of the deadband parameter; or (2) based on an approved NERC Reliability



Standard providing for an equivalent or more stringent parameter. The deadband parameter shall be: the range of frequencies above and below nominal (60 Hz) in which the governor or equivalent controls is not expected to adjust the Small Generating Facility's real power output in response to frequency deviations. The deadband shall be implemented: (1) without a step to the droop curve, that is, once the frequency deviation exceeds the deadband parameter, the expected change in the Small Generating Facility's real power output in response to frequency deviations shall start from zero and then increase (for under-frequency deviations) or decrease (for over-frequency deviations) linearly in proportion to the magnitude of the frequency deviation; or (2) in accordance with an approved NERC Reliability Standard providing for an equivalent or more stringent parameter. Interconnection Customer shall notify System Operator and Interconnecting Transmission Owner that the primary frequency response capability of the Small Generating Facility has been tested and confirmed during commissioning. Once Interconnection Customer has synchronized the Small Generating Facility with the New England Transmission System, Interconnection Customer shall operate the Small Generating Facility consistent with the provisions specified in Articles 1.8.3.1 and 1.8.3.2 of this Agreement. The primary frequency response requirements contained herein shall apply to both synchronous and non-synchronous Small Generating Facilities.

1.8.3.1 Governor or Equivalent Controls. Whenever the Small Generating Facility is operated in parallel with the New England Transmission System, Interconnection Customer shall operate the Small Generating Facility with its governor or equivalent controls in service and responsive to frequency. Interconnection Customer shall: (1) in coordination with System Operator and Interconnecting Transmission Owner, set the deadband parameter to: (1) a maximum of  $\pm 0.036$  Hz and set the droop parameter to a maximum of 5 percent; or (2) implement the relevant droop and deadband settings from an approved NERC Reliability Standard that provides for equivalent or more stringent parameters. Interconnection Customer shall be required to provide the status and settings of the governor or equivalent controls to System Operator and Interconnecting Transmission Owner upon request. If Interconnection Customer needs to operate the Small Generating Facility with its governor or equivalent controls not in service, Interconnection Customer shall immediately notify System Operator and Interconnecting Transmission Owner, and provide both with the following

information: (1) the operating status of the governor or equivalent controls (i.e., whether it is currently out of service or when it will be taken out of service); (2) the reasons for removing the governor or equivalent controls from service; and (3) a reasonable estimate of when the governor or equivalent controls will be returned to service. Interconnection Customer shall make Reasonable Efforts to return its governor or equivalent controls into service as soon as practicable. Interconnection Customer shall make Reasonable Efforts to keep outages of the Small Generating Facility's governor or equivalent controls to a minimum whenever the Small Generating Facility is operated in parallel with the New England Transmission System.

1.8.3.2 Timely and Sustained Response. Interconnection Customer shall ensure that the Small Generating Facility's real power response to sustained frequency deviations outside of the deadband setting is automatically provided and shall begin immediately after frequency deviates outside of the deadband, and to the extent the Small Generating Facility has operating capability in the direction needed to correct the frequency deviation. Interconnection Customer shall not block or otherwise inhibit the ability of the governor or equivalent controls to respond and shall ensure that the response is not inhibited, except under certain operational constraints including, but not limited to, ambient temperature limitations, physical energy limitations, outages of mechanical equipment, or regulatory requirements. The Small Generating Facility shall sustain the real power response at least until system frequency returns to a value within the deadband setting of the governor or equivalent controls. A Commission-approved Reliability Standard with equivalent or more stringent requirements shall supersede the above requirements.

1.8.3.3 Exemptions. Small Generating Facilities that are regulated by the United States Nuclear Regulatory Commission shall be exempt from Articles 1.8.3, 1.8.3.1, and 1.8.3.2 of this Agreement. Small Generating Facilities that are behind the meter generation that is sized-to-load (i.e., the thermal load and the generation are near-balanced in real-time operation and the generation is primarily controlled to maintain the unique thermal, chemical, or mechanical output necessary for the operating requirements of its host facility) shall be required to

install primary frequency response capability in accordance with the droop and deadband capability requirements specified in Article 1.8.3, but shall be otherwise exempt from the operating requirements in Articles 1.8.3, 1.8.3.1, 1.8.3.2, and 1.8.3.4 of this Agreement.

1.8.3.4 Electric Storage Resources. Interconnection Customer interconnecting a Small Generating Facility that is an electric storage resource shall establish an operating range in Attachment 5 of its SGIA that specifies a minimum state of charge and a maximum state of charge between which the electric storage resource will be required to provide primary frequency response consistent with the conditions set forth in Articles 1.8.3, 1.8.3.1, 1.8.3.2 and 1.8.3.3 of this Agreement. Attachment 5 shall specify whether the operating range is static or dynamic, and shall consider: (1) the expected magnitude of frequency deviations in the interconnection; (2) the expected duration that system frequency will remain outside of the deadband parameter in the interconnection; (3) the expected incidence of frequency deviations outside of the deadband parameter in the interconnection; (4) the physical capabilities of the electric storage resource; (5) operational limitations of the electric storage resource due to manufacturer specifications; and (6) any other relevant factors agreed to by System Operator, Interconnecting Transmission Owner and Interconnection Customer. If the operating range is dynamic, then Attachment 5 must establish how frequently the operating range will be reevaluated and the factors that may be considered during its reevaluation.

Interconnection Customer's electric storage resource is required to provide timely and sustained primary frequency response consistent with Article 1.8.3.2 of this Agreement when it is online and dispatched to inject electricity to the New England Transmission System and/or receive electricity from the New England Transmission System. This excludes circumstances when the electric storage resource is not dispatched to inject electricity to the New England Transmission System and/or dispatched to receive electricity from the New England Transmission System. If Interconnection Customer's electric storage resource is charging at the time of a frequency deviation outside of its deadband parameter, it is to increase (for over-frequency deviations) or decrease (for under-frequency

deviations) the rate at which it is charging in accordance with its droop parameter. Interconnection Customer's electric storage resource is not required to change from charging to discharging, or vice versa, unless the response necessitated by the droop and deadband settings requires it to do so and it is technically capable of making such a transition.

1.9 Capitalized terms used herein shall have the meanings specified in the Glossary of Terms in Attachment 1 or the body of this Agreement. Capitalized terms in Schedule 23 that are not defined in the Glossary of Terms shall have the meanings specified in Sections I.2.2. of the Tariff.

1.10 Scope of Service

1. 10.1 Interconnection Product Options. Interconnection Customer has selected the following (checked) type of Interconnection Service:

☐ NR for NR Interconnection Service (NR Capability Only)

☒ CNR for CNR Interconnection Service (NR Capability and CNR Capability)

1.10.1.1 Capacity Network Resource Interconnection Service (CNR Interconnection Service)

- a. The Product. The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and the Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which all other CNRs are interconnected under the CC Interconnection Standard. CNR Interconnection Service allows the Interconnection Customer's Small Generating Facility to be designated as a CNR to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the net CNR Capability, or as otherwise provided in Market Rule 1, Section III of the Tariff, on the same basis as all other existing Capacity Network Resources, and to be studied as a Capacity Network Resource on the assumption that such a designation will occur.

1.10.1.2 Network Resource Interconnection Service (NR Interconnection Service).

- a. The Product. The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the Small Generating Facility in a manner comparable to that in which all other Network Resources are interconnected under the NC Interconnection Standard.

NR Interconnection Service allows the Interconnection Customer's Small Generating Facility to participate in the New England Markets, in accordance with Market Rule, Section III of the Tariff, up to the gross and net NR Capability or as otherwise provided in Market Rule 1, Section III of the Tariff. Notwithstanding the above, the portion of a Small Generating Facility that has been designated as a Network Resource interconnected under the NC Interconnection Standard cannot be a capacity resource under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNR Interconnection Service.

- 1.10.1.3 Provision of Service. System Operator and Interconnecting Transmission Owner shall provide Interconnection Service for the Small Generating Facility at the Point of Interconnection.
- 1.10.1.4 Performance Standards. Each Party shall perform all of its obligations under this SGIA in accordance with Applicable Laws and Regulations, the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such requirements and standards, such Party shall not be deemed to be in Breach of this SGIA for its compliance therewith. If such Party is the Interconnecting Transmission Owner, then that Party shall amend the SGIA and System Operator, in conjunction with the Interconnecting Transmission Owner, shall submit the amendment to the Commission for approval.
- 1.10.1.5 No Transmission Service Delivery. The execution of this SGIA does not constitute a request for, nor the provision of, any service except for

Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service, or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

- 1.10.1.6 Transmission Delivery Service Implications. CNR Interconnection Service and NR Interconnection Service allow the Interconnection Customer's Small Generating Facility to be designated by any Network Customer under the Tariff on the New England Transmission System as a Capacity Network Resource or Network Resource, up to the net CNR Capability or NR Capability, respectively, on the same basis as all other existing Capacity Network Resources and Network Resources interconnected to the New England Transmission System, and to be studied as a Capacity Network Resource or a Network Resource on the assumption that such a designation will occur. Although CNR Interconnection Service and NR Interconnection Service do not convey a reservation of transmission service, any Network Customer can utilize its network service under the Tariff to obtain delivery of capability from the Interconnection Customer's Small Generating Facility in the same manner as it accesses Capacity Network Resources and Network Resources. A Small Generating Facility receiving CNR Interconnection Service or NR Interconnection Service may also be used to provide Ancillary Services, in accordance with the Tariff and Market Rule 1, after technical studies and/or periodic analyses are performed with respect to the Small Generating Facility's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Capacity Network Resource or Network Resource. However, if an Interconnection Customer's Small Generating Facility has not been designated as a Capacity Network Resource or as a Network Resource by any load, it cannot be required to provide Ancillary Services except to the extent such requirements extend to all Generating Facilities that are similarly situated.

CNR Network Interconnection Service and NR Interconnection Service do not necessarily provide the Interconnection Customer with the capability to physically deliver the output of its Small Generating Facility to any particular load on the New England Transmission System without incurring congestion costs. In the event of transmission constraints on the New England Transmission System, the Interconnection Customer's Small Generating Facility shall be subject to the applicable congestion management procedures for the New England Transmission System in the same manner as other Capacity Network Resources or Network Resources.

There is no requirement either at the time of study or interconnection, or at any point in the future, that the Interconnection Customer's Small Generating Facility be designated as a Capacity Network Resource or as a Network Resource by a Network Customer under the Tariff or that the Interconnection Customer identify a specific buyer (or sink). To the extent a Network Customer does designate the Small Generating Facility as either a Capacity Network Resource or a Network Resource, it must do so pursuant to the Tariff.

Once an Interconnection Customer satisfies the requirements for obtaining CNR Interconnection Service or NR Interconnection Service, as long as the Small Generating Facility has not been deemed to be retired, any future transmission service request for delivery from the Small Generating Facility on the New England Transmission System of any amount of capacity capability and/or energy capability will not require that any additional studies be performed or that any further upgrades associated with such Small Generating Facility be undertaken, regardless of whether or not such Small Generating Facility is ever designated by a Network Customer as a Capacity Network Resource or Network Resource and regardless of changes in ownership of the Small Generating Facility. To the extent the Interconnection Customer enters into an arrangement for long-term transmission service for deliveries from the Small Generating Facility outside the New England Transmission System, or if the unit has been deemed to be

retired, such request may require additional studies and upgrades in order for Interconnecting Transmission Owner to grant such request.

## **Article 2. Inspection, Testing, Authorization, and Right of Access**

### **2.1 Equipment Testing and Inspection**

- 2.1.1. The Interconnection Customer shall test and inspect its Small Generating Facility and Interconnection Facilities prior to interconnection. The Interconnection Customer shall notify the System Operator and the Interconnecting Transmission Owner of such activities no fewer than five Business Days (or as may be agreed to by the Parties) prior to such testing and inspection. Testing and inspection shall occur on a Business Day. The Interconnecting Transmission Owner may, at its own expense, send qualified personnel to the Small Generating Facility site to inspect the interconnection and observe the testing. The Interconnection Customer shall provide the Interconnecting Transmission Owner a written test report when such testing and inspection is completed.
- 2.1.2 The Interconnecting Transmission Owner shall provide the Interconnection Customer and the System Operator written acknowledgment that it has received the Interconnection Customer's written test report. Such written acknowledgment shall not be deemed to be or construed as any representation, assurance, guarantee, or warranty by the Interconnecting Transmission Owner of the safety, durability, suitability, or reliability of the Small Generating Facility or any associated control, protective, and safety devices owned or controlled by the Interconnection Customer or the quality of power produced by the Small Generating Facility.

### **2.2 Authorization Required Prior to Parallel Operation**

- 2.2.1 The Interconnecting Transmission Owner [and System Operator] shall use Reasonable Efforts to list applicable parallel operation requirements in Attachment 5 of this Agreement. Additionally, the Interconnecting Transmission Owner shall notify the Interconnection Customer of any changes to these requirements as soon as they are known. The Interconnecting Transmission Owner shall make Reasonable Efforts to cooperate with the Interconnection Customer in meeting



requirements necessary for the Interconnection Customer to commence parallel operations by the in-service date.

- 2.2.2 The Interconnection Customer shall not operate its Small Generating Facility in parallel with the New England Transmission System [or Interconnecting Transmission Owner's transmission facilities] without prior written authorization of the Interconnecting Transmission Owner. The Transmission Provider will provide such authorization once the Transmission Provider receives notification that the Interconnection Customer has complied with all applicable parallel operation requirements. Such authorization shall not be unreasonably withheld, conditioned, or delayed.

2.3 Right of Access

- 2.3.1 Upon reasonable notice, the Interconnecting Transmission Owner may send a qualified person to the premises of the Interconnection Customer at or immediately before the time the Small Generating Facility first produces energy to inspect the interconnection, and observe the commissioning of the Small Generating Facility (including any required testing), startup, and operation for a period of up to three Business Days after initial start-up of the unit. In addition, the Interconnection Customer shall notify the Interconnecting Transmission Owner at least five Business Days prior to conducting any on-site verification testing of the Small Generating Facility.
- 2.3.2 Following the initial inspection process described above, at reasonable hours, and upon reasonable notice, or at any time without notice in the event of an emergency or hazardous condition, the Interconnecting Transmission Owner shall have access to the Interconnection Customer's premises for any reasonable purpose in connection with the performance of the obligations imposed on it by this Agreement or if necessary to meet its legal obligation to provide service to its customers.
- 2.3.3 Each Party shall be responsible for its own costs associated with following this article.

**Article 3. Effective Date, Term, Termination, and Disconnection**

3.1 Effective Date

This Agreement shall become effective upon execution by the Parties subject to acceptance by the Commission (if applicable), or if filed unexecuted, upon the date specified by the Commission. System Operator and Interconnecting Transmission Owner shall promptly file this Agreement with the Commission upon execution, if required.

### 3.2 Term of Agreement

This Agreement shall become effective on the Effective Date and by mutual agreement of the Parties shall remain in effect for a period of \_\_\_\_ years, (Term to be specified in individual Agreements, but in no case should the term be less than ten years from the Effective Date or such other longer period as the Interconnection Customer may request) and shall be automatically renewed for each successive one-year period thereafter, unless terminated earlier in accordance with article 3.3 of this Agreement.

### 3.3 Termination

No termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing with the Commission of a notice of termination of this Agreement (if required), which notice has been accepted for filing by the Commission.

3.3.1 The Interconnection Customer may terminate this Agreement at any time by giving the System Operator and Interconnecting Transmission Owner 20 Business Days written notice.

3.3.2 Each Party may terminate this Agreement after Default pursuant to article 7.6.

3.3.3 Upon termination of this Agreement, the Small Generating Facility will be disconnected from the Interconnecting Transmission Owner's Interconnection Facilities. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from the non-terminating Party's Default of this SGIA or such non-terminating Party otherwise is responsible for these costs under this SGIA.

3.3.4 The termination of this Agreement shall not relieve any Party of its liabilities and obligations, owed or continuing at the time of the termination.

3.3.5 The provisions of this article shall survive termination or expiration of this Agreement.

3.4 Temporary Disconnection

Temporary disconnection shall continue only for so long as reasonably necessary under Good Utility Practice.

3.4.1 Emergency Conditions

“Emergency Condition” shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, the Interconnecting Transmission Owner’s Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of the Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Small Generating Facility or the Interconnection Customer's Interconnection Facilities. The System Operator and the Interconnecting Transmission Owner may immediately suspend interconnection service and temporarily disconnect the Small Generating Facility in accordance with applicable provisions of the Operating Requirements. The System Operator and Interconnecting Transmission Owner shall notify the Interconnection Customer promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the Interconnection Customer's operation of the Small Generating Facility. The Interconnection Customer shall notify the System Operator and Interconnecting Transmission Owner promptly when it becomes aware of an Emergency Condition that may reasonably be expected to affect the New England Transmission System or any Affected Systems. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the

operation of the Parties' facilities and operations, its anticipated duration, and the necessary corrective action.

### 3.4.2 Routine Maintenance, Construction, and Repair

3.4.2.1 Outage Authority and Coordination. The System Operator shall have the authority to coordinate facility outages in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Each Party may in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, in coordination with the other Party(ies), remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's(ies') facilities as necessary to perform maintenance or testing or to install or replace equipment, subject to the oversight of System Operator in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

3.4.2.2 Outage Schedules. Outage scheduling, and any related compensation, shall be in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

3.4.2.3 Interruption of Service. In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, the System Operator or Interconnecting Transmission Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect System Operator's or Interconnecting Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the New England Transmission System.

### 3.4.3 Forced Outages

During any forced outage, the Interconnecting Transmission Owner [and the System Operator] may suspend interconnection service to effect immediate repairs on the New

England Transmission System. The Interconnecting Transmission Owner shall use Reasonable Efforts to provide the Interconnection Customer with prior notice. If prior notice is not given, the Interconnecting Transmission Owner shall, upon request, provide the Interconnection Customer written documentation after the fact explaining the circumstances of the disconnection.

#### 3.4.4 Adverse Operating Effects

The Interconnecting Transmission Owner shall notify the Interconnection Customer and the System Operator as soon as practicable if, based on Good Utility Practice, operation of the Small Generating Facility may cause disruption or deterioration of service to other customers served from the same electric system, or if operating the Small Generating Facility could cause damage to the New England Transmission System or Affected Systems. Supporting documentation used to reach the decision to disconnect shall be provided to the Interconnection Customer upon request. If, after notice, the Interconnection Customer fails to remedy the adverse operating effect within a reasonable time, the Interconnecting Transmission Owner may disconnect the Small Generating Facility. The Interconnecting Transmission Owner shall provide the Interconnection Customer and the System Operator with five Business Day notice of such disconnection, unless the provisions of article 3.4.1 apply.

#### 3.4.5 Modification of the Small Generating Facility

The Interconnection Customer must receive written authorization from: (1) the Interconnecting Transmission Owner before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the Interconnecting Transmission Owner's Interconnection Facilities; and (2) the System Operator before making any change to the Small Generating Facility that may have a material impact on the safety or reliability of the New England Transmission System. Such authorization shall not be unreasonably withheld. Modifications shall be done in accordance with Good Utility Practice. If the Interconnection Customer makes such modification without the System Operator's or the Interconnecting Transmission Owner's, as appropriate, prior written authorization, the latter shall have the right to temporarily disconnect the Small Generating Facility.

#### 3.4.6 Reconnection

The Parties shall cooperate with each other to restore the Small Generating Facility, Interconnection Facilities, and the New England Transmission System to their normal operating state as soon as reasonably practicable following a temporary disconnection.

### **Article 4. Cost Responsibility for Interconnection Facilities and Distribution Upgrades**

#### 4.1 Interconnection Facilities

4.1.1 The Interconnection Customer shall pay for the cost of the Interconnection Facilities itemized in Attachment 2 of this Agreement. The Interconnecting Transmission Owner shall provide a best estimate cost, including overheads, for the purchase and construction of its Interconnection Facilities and provide a detailed itemization of such costs. Costs associated with Interconnection Facilities may be shared with other entities that may benefit from such facilities by agreement of the Interconnection Customer, such other entities, and the Interconnecting Transmission Owner.

4.1.2 The Interconnection Customer shall be responsible for its share of all reasonable expenses, including overheads, associated with (1) owning, operating, maintaining, repairing, and replacing its own Interconnection Facilities, and (2) operating, maintaining, repairing, and replacing the Interconnecting Transmission Owner's Interconnection Facilities.

#### 4.2 Distribution Upgrades

The Interconnecting Transmission Owner shall design, procure, construct, install, and own the Distribution Upgrades described in Attachment 6 of this Agreement. If the Interconnecting Transmission Owner and the Interconnection Customer agree, the Interconnection Customer may construct Distribution Upgrades that are located on land owned by the Interconnection Customer. The actual cost of the Distribution Upgrades, including overheads, shall be directly assigned to the Interconnection Customer. The Interconnection Customer shall be responsible for its share of all reasonable expenses, associated with operating, maintaining, repairing, and replacing such

Distribution Upgrades, except to the extent that a retail tariff of, or an agreement with, the Interconnecting Transmission Owner or its distribution company affiliate, if appropriate, provides otherwise.

## **Article 5. Cost Responsibility for Network Upgrades**

### **5.1 Applicability**

No portion of this article 5 shall apply unless the interconnection of the Small Generating Facility requires Network Upgrades, including Stand Alone Network Upgrades.

### **5.2 Network Upgrades**

The Interconnecting Transmission Owner shall design, procure, construct, install, and own the Network Upgrades described in Attachment 6 of this Agreement. If the Interconnecting Transmission Owner and the Interconnection Customer agree, the Interconnection Customer may construct Network Upgrades that are located on land owned by the Interconnection Customer. Unless the Interconnecting Transmission Owner elects to pay for Network Upgrades, the actual cost of the Network Upgrades, including overheads, shall be borne by the Interconnection Customer.

5.2.1.1 Cost Allocation. Cost allocation of Generator Interconnection Related Upgrades shall be in accordance with Schedule 11 of Section II of the Tariff.

5.2.1.2 Compensation. Any compensation due to the Interconnection Customer for increases in transfer capability to the PTF resulting from its Generator Interconnection Related Upgrade shall be determined in accordance with Sections II and III of the Tariff.

### **5.3 Special Provisions for Affected Systems**

The Interconnection Customer shall enter into separate related facilities agreements to address any upgrades to the Affected System(s) that are necessary for safe and reliable interconnection of the Interconnection Customer's Small Generating Facility.

#### 5.4 Rights Under Other Agreements

Notwithstanding any other provision of this Agreement, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades.

### **Article 6. Billing, Payment, Milestones, and Financial Security**

#### 6.1 Billing and Payment Procedures and Final Accounting

6.1.1 The Interconnecting Transmission Owner shall bill the Interconnection Customer for the design, engineering, construction, and procurement costs of Interconnection Facilities and Upgrades contemplated by this Agreement on a monthly basis, or as otherwise agreed by the Parties. The Interconnection Customer shall pay each bill within 30 calendar days of receipt, or as otherwise agreed to by the Parties.

6.1.2 Within three months of completing the construction and installation of the Interconnecting Transmission Owner's Interconnection Facilities and/or Upgrades described in the Attachments to this Agreement, the Transmission Provider shall provide the Interconnection Customer with a final accounting report of any difference between (1) the Interconnection Customer's cost responsibility for the actual cost of such facilities or Upgrades, and (2) the Interconnection Customer's previous aggregate payments to the Interconnecting Transmission Owner for such facilities or Upgrades. If the Interconnection Customer's cost responsibility exceeds its previous aggregate payments, the Interconnecting Transmission Owner shall invoice the Interconnection Customer for the amount due and the Interconnection Customer shall make payment to the Interconnecting Transmission Owner within 30 calendar days. If the Interconnection Customer's previous aggregate payments exceed its cost responsibility under this Agreement, the Interconnecting Transmission Owner shall refund to the Interconnection Customer an amount equal to the difference within 30 calendar days of the final accounting report.



## 6.2 Milestones

The Parties shall agree on milestones for which each Party is responsible and list them in Attachment 4 of this Agreement. A Party's obligations under this provision may be extended by agreement. If a Party anticipates that it will be unable to meet a milestone for any reason other than a Force Majeure Event, it shall immediately notify the other Party(ies) of the reason(s) for not meeting the milestone and (1) propose the earliest reasonable alternate date by which it can attain this and future milestones, and (2) requesting appropriate amendments to Attachment 4. The Party affected by the failure to meet a milestone shall not unreasonably withhold agreement to such an amendment unless (1) it will suffer significant uncompensated economic or operational harm from the delay, (2) attainment of the same milestone has previously been delayed, or (3) it has reason to believe that the delay in meeting the milestone is intentional or unwarranted notwithstanding the circumstances explained by the Party proposing the amendment.

## 6.3 Financial Security Arrangements

At least 20 Business Days prior to the commencement of the design, procurement, installation, or construction of a discrete portion of the Interconnecting Transmission Owner's Interconnection Facilities and Upgrades, the Interconnection Customer shall provide the Interconnecting Transmission Owner a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to the Interconnecting Transmission Owner in accordance with Section 7 of Schedule 11 of the Tariff. Such security for payment shall be in an amount sufficient to cover the costs for constructing, designing, procuring, and installing the applicable portion of the Interconnecting Transmission Owner's Interconnection Facilities and Upgrades. In addition:

- 6.3.1 The guarantee must be made by an entity that meets the creditworthiness requirements of the Interconnecting Transmission Owner, and contain terms and conditions that guarantee payment of any amount that may be due from the Interconnection Customer, up to an agreed-to maximum amount.
- 16.2.1 The letter of credit or surety bond must be issued by a financial institution or insurer reasonably acceptable to the Interconnecting Transmission Owner and must specify a reasonable expiration date.

## **Article 7. Assignment, Liability, Indemnity, Force Majeure, Consequential Damages, and Default**

Notwithstanding any other provision of this Agreement, the liability, indemnification and insurance provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnection Transmission Owner and the liability, indemnification and insurance provisions of the Tariff apply to the relationship between the System Operator and the Interconnection Customer and between the Interconnecting Transmission Owner and the Interconnection Customer.

### **7.1 Assignment**

This Agreement may be assigned by a Party upon 15 Business Days prior written notice and opportunity to object by the other Parties; provided that:

- 7.1.1 The Parties may assign this Agreement without the consent of the other Parties to any affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Agreement, provided that the Interconnection Customer promptly notifies the other Parties of any such assignment.
- 7.1.2 The Interconnection Customer shall have the right to assign this Agreement, without the consent of the Interconnecting Transmission Owner or the System Operator, for collateral security purposes to aid in providing financing for the Small Generating Facility, provided that the Interconnection Customer will promptly notify the Interconnecting Transmission Owner and the System Operator of any such assignment.
- 7.1.3 Any attempted assignment that violates this article is void and ineffective. Assignment shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. An assignee is responsible for meeting the same financial, credit, and insurance obligations as the Interconnection Customer. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## 7.2 Limitation of Liability

Each Party's liability to the other Party(ies) for any loss, cost, claim, injury, liability, or expense, including reasonable attorney's fees, relating to or arising from any act or omission in its performance of this Agreement, shall be limited to the amount of direct damage actually incurred. In no event shall a Party be liable to another Party for any indirect, special, consequential, or punitive damages, except as authorized by this Agreement.

## 7.3 Indemnity

7.3.1 This provision protects each Party from liability incurred to third parties as a result of carrying out the provisions of this Agreement. Liability under this provision is exempt from the general limitations on liability found in article 7.2.

7.3.2 Each Party shall at all times indemnify, defend, and hold the other Parties harmless from, any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party's(ies') action or failure to meet its obligations under this Agreement on behalf of the indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the indemnified Party.

7.3.3 If an indemnified person is entitled to indemnification under this article as a result of a claim by a third party, and the indemnifying Party fails, after notice and reasonable opportunity to proceed under this article, to assume the defense of such claim, such indemnified person may at the expense of the indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

7.3.4 If an indemnifying Party is obligated to indemnify and hold any indemnified person harmless under this article, the amount owing to the indemnified person shall be the amount of such indemnified person's actual loss, net of any insurance or other recovery.

7.3.5 Promptly after receipt by an indemnified person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in this article may apply, the indemnified person shall notify the indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the indemnifying Party.

#### 7.4 Consequential Damages

Other than as expressly provided for in this Agreement, in no event shall a Party be liable under any provision of this Agreement for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to another Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

#### 7.5 Force Majeure

7.5.1 As used in this article, a Force Majeure Event shall mean "any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure Event does not include an act of negligence or intentional wrongdoing."

7.5.2 If a Force Majeure Event prevents a Party from fulfilling any obligations under this Agreement, the Party affected by the Force Majeure Event (Affected Party) shall promptly notify the other Party(ies), either in writing or via the telephone, of the existence of the Force Majeure Event. The notification must specify in reasonable detail the circumstances of the Force Majeure Event, its expected duration, and the steps that the Affected Party is taking to mitigate the effects of the event on its performance. The Affected Party shall keep the other Party(ies) informed on a continuing basis of

developments relating to the Force Majeure Event until the event ends. The Affected Party will be entitled to suspend or modify its performance of obligations under this Agreement (other than the obligation to make payments) only to the extent that the effect of the Force Majeure Event cannot be mitigated by the use of Reasonable Efforts. The Affected Party will use Reasonable Efforts to resume its performance as soon as possible.

## 7.6 Default

7.6.1 No Default shall exist where such failure to discharge an obligation (other than the payment of money) is the result of a Force Majeure Event as defined in this Agreement or the result of an act or omission of the other Party(ies). Upon a Default, the non-defaulting Party shall give written notice of such Default to the defaulting Party. Except as provided in article 7.6.2, the defaulting Party shall have 60 calendar days from receipt of the Default notice within which to cure such Default; provided however, if such Default is not capable of cure within 60 calendar days, the defaulting Party shall commence such cure within 20 calendar days after notice and continuously and diligently complete such cure within six months from receipt of the Default notice; and, if cured within such time, the Default specified in such notice shall cease to exist.

7.6.2 If a Default is not cured as provided in this article, or if a Default is not capable of being cured within the period provided for herein, the non-defaulting Party(ies) shall have the right to terminate this Agreement by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not those Parties terminate this Agreement, to recover from the defaulting Party all amounts due hereunder, plus all other damages and remedies to which it is entitled at law or in equity. The provisions of this article will survive termination of this Agreement.

## **Article 8. Insurance Requirements**

### 8.1 General Liability

The Interconnection Customer shall, at its own expense, maintain in force general liability insurance without any exclusion for liabilities related to the interconnection undertaken pursuant to this Agreement. The amount of such insurance shall be sufficient to insure against all

reasonably foreseeable direct liabilities given the size and nature of the generating equipment being interconnected, the interconnection itself, and the characteristics of the system to which the interconnection is made. The Interconnection Customer shall obtain additional insurance only if necessary as a function of owning and operating a generating facility. Such insurance shall be obtained from an insurance provider authorized to do business in the State where the interconnection is located. Certification that such insurance is in effect shall be provided upon request of the Interconnecting Transmission Owner, except that the Interconnection Customer shall show proof of insurance to the Interconnecting Transmission Owner no later than ten Business Days prior to the anticipated commercial operation date. An Interconnection Customer of sufficient credit-worthiness may propose to self-insure for such liabilities, and such a proposal shall not be unreasonably rejected.

## 8.2 Insurer Requirements and Endorsements

All required insurance shall be carried by reputable insurers qualified to underwrite insurance in the state where the interconnection is located having a Best Rating of “A-”. In addition, all insurance shall, (a) include Interconnecting Transmission Owner and System Operator as additional insureds; (b) contain a severability of interest clause or cross-liability clause; (c) provide that Interconnecting Transmission Owner and System Operator shall not incur liability to the insurance carrier for payment of premium for such insurance; and (d) provide for thirty (30) calendar days’ written notice to Interconnecting Transmission Owner and System Operator prior to cancellation, termination, or material change of such insurance; provided that to the extent the Interconnection Customer is satisfying the requirements of subpart (d) of this paragraph by means of a presently existing insurance policy, the Interconnection Customer shall only be required to make good faith efforts to satisfy that requirement and will assume the responsibility for notifying the Interconnecting Transmission Owner and System Operator as required above.

If the requirement of clause (a) in the paragraph above prevents Interconnection Customer from obtaining the insurance required without added cost or due to written refusal by the insurance carrier, then upon Interconnection Customer’s written notice to Interconnecting Transmission Owner and System Operator, the requirements of clause (a) shall be waived.

## 8.3 Evidence of Insurance

Evidence of the insurance required shall state that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by Interconnection Customer.

The Interconnection Customer is responsible for providing the Interconnecting Transmission Owner and the System Operator with evidence of insurance in compliance with this Tariff on an annual basis.

Prior to the Interconnecting Transmission Owner commencing work on Interconnection Facilities, Network Upgrades and Distribution Upgrades, the Interconnection Customer shall have its insurer furnish to the Interconnecting Transmission Owner and the System Operator certificates of insurance evidencing the insurance coverage required above. The Interconnection Customer shall notify and send to the Interconnecting Transmission Owner and the System Operator a certificate of insurance for any policy written on a "claims-made" basis. The Interconnecting Transmission Owner and the System Operator may at their discretion require the Interconnection Customer to maintain tail coverage for three years on all policies written on a "claims-made" basis.

#### 8.4 Self Insurance

If Interconnection Customer is a company with a self-insurance program established in accordance with commercially acceptable risk management practices, Interconnection Customer may comply with the following in lieu of the above requirements as reasonably approved by the Interconnecting Transmission Owner and the System Operator:

- 1) Interconnection Customer shall provide to Interconnecting Transmission Owner and System Operator, at least thirty (30) calendar days prior to the Date of Initial Operation, evidence of such program to self-insure to a level of coverage equivalent to that required.
- 2) If Interconnection Customer ceases to self-insure to the standards required hereunder, or if Interconnection Customer is unable to provide continuing evidence of Interconnection Customer's financial ability to self-insure, Interconnection Customer agrees to promptly obtain the coverage required under Article 8.1.

#### 8.5 Interconnecting Transmission Owner Insurance

The Interconnecting Transmission Owner agrees to maintain general liability insurance or self-insurance consistent with the Interconnecting Transmission Owner's commercial practice. Such insurance or self-insurance shall not exclude coverage for the Interconnecting Transmission Owner's liabilities undertaken pursuant to this Agreement.

### **Article 9. Confidentiality**

9.1 Confidential Information shall include without limitation, all information governed by the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, and any confidential and/or proprietary information provided by a Party to the another Party that is clearly marked or otherwise designated "Confidential." For purposes of this Agreement all design, operating specifications, and metering data provided by the Interconnection Customer shall be deemed Confidential Information regardless of whether it is clearly marked or otherwise designated as such.

9.2 Confidential Information does not include information previously in the public domain, required to be publicly submitted or divulged by Governmental Authorities (after notice to the other Party(ies) and after exhausting any opportunity to oppose such publication or release), or necessary to be divulged in an action to enforce this Agreement. Each Party receiving Confidential Information shall hold such information in confidence and shall not disclose it to any third party nor to the public without the prior written authorization from the Party providing that information, except to fulfill obligations under this Agreement, or to fulfill legal or regulatory requirements.

9.2.1 Each Party shall employ at least the same standard of care to protect Confidential Information obtained from the other Party(ies) as it employs to protect its own Confidential Information.

9.2.2 Each Party is entitled to equitable relief, by injunction or otherwise, to enforce its rights under this provision to prevent the release of Confidential Information without bond or proof of damages, and may seek other remedies available at law or in equity for breach of this provision.



- 9.3 Notwithstanding anything in this article to the contrary, and pursuant to 18 CFR § 1b.20, if the Commission, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this Agreement, the Party shall provide the requested information to the Commission, within the time provided for in the request for information. In providing the information to the Commission, the Party may, consistent with 18 CFR § 388.112, request that the information be treated as confidential and non-public by the Commission and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) to this Agreement prior to the release of the Confidential Information to the Commission. The Party shall notify the other Party(ies) to this Agreement when it is notified by the Commission that a request to release Confidential Information has been received by the Commission, at which time either of the Parties may respond before such information would be made public, pursuant to 18 CFR § 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

## **Article 10. Disputes**

- 10.1 The Parties agree to attempt to resolve all disputes arising out of the interconnection process according to the provisions of this article.
- 10.2 In the event of a dispute, a Party shall provide the other Party(ies) with a written Notice of Dispute. Such Notice shall describe in detail the nature of the dispute.
- 10.3 If the dispute has not been resolved within two Business Days after receipt of the Notice, any Party may contact the Commission's Dispute Resolution Service (DRS) for assistance in resolving the dispute.
- 10.4 The DRS will assist the Parties in either resolving their dispute or in selecting an appropriate dispute resolution venue (e.g., mediation, settlement judge, early neutral evaluation, or technical expert) to assist the Parties in resolving their dispute. DRS can be reached at 1-877-337-2237 or via the internet at <http://www.ferc.gov/legal/adr.asp>.

- 10.5 Each Party agrees to conduct all negotiations in good faith and will be responsible for its pro-rata share of any costs paid to neutral third-parties.
- 10.6 If no Party elects to seek assistance from the DRS, or if the attempted dispute resolution fails, then each Party may exercise whatever rights and remedies it may have in equity or law consistent with the terms of this Agreement.

#### **Article 11. Taxes**

- 11.1 The Parties agree to follow all applicable tax laws and regulations, consistent with Commission policy and Internal Revenue Service requirements.
- 11.2 Each Party shall cooperate with the other to maintain the other Party's(ies') tax status. Nothing in this Agreement is intended to adversely affect the Interconnecting Transmission Owner's tax exempt status with respect to the issuance of bonds including, but not limited to, local furnishing bonds.

#### **Article 12. Miscellaneous**

##### **12.1 Governing Law, Regulatory Authority, and Rules**

The validity, interpretation and enforcement of this Agreement and each of its provisions shall be governed by the laws of the state of \_\_\_\_\_ (where the Point of Interconnection is located), without regard to its conflicts of law principles. This Agreement is subject to all Applicable Laws and Regulations. Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, or regulations of a Governmental Authority.

##### **12.2 Amendment**

The Parties may amend this Agreement by a written instrument duly executed by the Parties, or under article 12.12 of this Agreement.

##### **12.3 No Third-Party Beneficiaries**

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and where permitted, their assigns.

#### 12.4 Waiver

The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

12.4.1 Any waiver at any time by a Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Agreement. Termination or default of this Agreement for any reason by Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Interconnecting Transmission Owner. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 12.5 Entire Agreement

Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, this Agreement, including all Attachments, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, there are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, either Party's compliance with its obligations under this Agreement.

#### 12.6 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

#### 12.7 No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Parties.

#### 12.8 Severability

If any provision or portion of this Agreement shall for any reason be held or adjudged to be invalid or illegal or unenforceable by any court of competent jurisdiction or other Governmental Authority, (1) such portion or provision shall be deemed separate and independent, (2) the Parties shall negotiate in good faith to restore insofar as practicable the benefits to each Party that were affected by such ruling, and (3) the remainder of this Agreement shall remain in full force and effect.

#### 12.9 Security Arrangements

Infrastructure security of the New England Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day reliability and operational security. The Commission expects the System Operator, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected to the New England Transmission System to comply with the recommendations offered by the President's Critical Infrastructure Protection Board and, eventually, best practice recommendations from the electric reliability authority. All public utilities are expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

#### 12.10 Environmental Releases

Each Party shall notify the other Party(ies), first orally and then in writing, of the release of any hazardous substances, any asbestos or lead abatement activities, or any type of remediation

activities related to the Small Generating Facility or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party(ies). The notifying Party shall (1) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than 24 hours after such Party becomes aware of the occurrence, and (2) promptly furnish to the other Party(ies) copies of any publicly available reports filed with any governmental authorities addressing such events.

#### 12.11 Subcontractors

Nothing in this Agreement shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this Agreement; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this Agreement in providing such services and each Party shall remain primarily liable to the other Party(ies) for the performance of such subcontractor.

12.11.1 The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this Agreement. The hiring Party shall be fully responsible to the other Party(ies) for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under this Agreement. Any applicable obligation imposed by this Agreement upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

12.11.2 The obligations under this article will not be limited in any way by any limitation of subcontractor's insurance.

#### 12.12 Reservation of Rights

Consistent with Section 4.8 of Schedule 23, the Interconnecting Transmission Owner and the System Operator shall have the right to make a unilateral filing with the Commission to modify this Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act

and the Commission's rules and regulations thereunder, and the Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this Agreement under any applicable provision of the Federal Power Act and the Commission's rules and regulations; provided that each Party shall have the right to protest any such filing by the other Party(ies) and to participate fully in any proceeding before the Commission in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations, except to the extent that the Parties otherwise agree as provided herein.

### **Article 13. Notices**

#### **13.1 General**

Unless otherwise provided in this Agreement, any written notice, demand, or request required or authorized in connection with this Agreement ("Notice") shall be deemed properly given if delivered in person, delivered by recognized national courier service, or sent by first class mail, postage prepaid, to the person specified below:

If to the Interconnection Customer:

[To be supplied]

If to the Interconnecting Transmission Owner:

[To be supplied]

If to the System Operator:

ISO New England Inc.

Attention: Generation Interconnection, Transmission Planning Department

One Sullivan Road

Holyoke, MA 01040-2841

Phone: \_\_\_\_\_ Fax: 413-540-4203

With a copy to:

Billing Department

ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

13.2 Billing and Payment

Billings and payments shall be sent to the addresses set out below:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner[To be supplied]

System Operator: ISO New England Inc.

Attention: Generation Interconnection, Transmission Planning Department  
One Sullivan Road  
Holyoke, MA 01040-2841  
Phone: \_\_\_\_\_ Fax: 413-540-4203

With a copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

13.3 Alternative Forms of Notice

Any notice or request required or permitted to be given by a Party to the other Party(ies) and not required by this Agreement to be given in writing may be so given by telephone, facsimile or e-mail to the telephone numbers and e-mail addresses set out below:

If to the Interconnection Customer:

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_

If to the Interconnecting Transmission Owner:

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

If to the System Operator:

Phone: \_\_\_\_\_ Fax: 413-540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

With a copy to:

Billing Department

Facsimile: (413) 535-4024

E-mail: [billingdept@iso-ne.com](mailto:billingdept@iso-ne.com)

#### 13.4 Designated Operating Representative

The Parties may also designate operating representatives to conduct the communications which may be necessary or convenient for the administration of this Agreement. This person will also serve as the point of contact with respect to operations and maintenance of the Party's facilities.

Interconnection Customer's Operating Representative:

[To be supplied]

Interconnecting Transmission Owner's Operating Representative:

[To be supplied]

System Operator's Operating Representative:

ISO New England Inc.

Attention: Generation Interconnection, Transmission Planning Department



One Sullivan Road

Holyoke, MA 01040-2841

Phone: \_\_\_\_\_ Fax: (413) 540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

DUNS Numbers:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner: [To be supplied]

### 13.5 Changes to the Notice Information

A Party may change this information by giving five Business Days written notice prior to the effective date of the change.

**Article 14.      Signatures**

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized representatives.

***[Insert name of]* (Interconnecting Transmission Owner)**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***[Insert name of]* (Interconnection Customer)**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**ISO New England Inc. (System Operator)**

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **ATTACHMENTS TO SGIA**

Attachment 1	Glossary of Terms
Attachment 2	Description and Costs of the Small Generating Facility, Interconnection Facilities, and Metering Equipment
Attachment 3	One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment and Upgrades
Attachment 4	Milestones
Attachment 5	Additional Operating Requirements for the New England Transmission System and Affected Systems Needed to Support the Interconnection Customer's Needs
Attachment 6	Interconnecting Transmission Owner's Description of its Upgrades, and Best Estimates of Upgrade Costs
Attachment 7	Commercial Operation Date

**Glossary of Terms**

**Administered Transmission System** – The PTF and the Non-PTF.

**Affected Party**– The entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affected System** – Any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affiliate** – With respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** – All duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Standards** – The requirements and guidelines of NERC, NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Systems.

**At-Risk Expenditure** – Money expended for the development of the Generating Facility that cannot be recouped if the Interconnection Customer were to withdraw the Interconnection Request for the Generating Facility. At-Risk Expenditure may include, but is not limited to, money expended on: (1) costs of federal, state, local, regional and town permits, (ii) Site Control, (iii) site-specific design and survey, (iv) construction activities, and (v) non-refundable deposits for major equipment components. For purposes of this definition, At-Risk Expenditure shall not include costs associated with the Interconnection Studies.

**Base Case** – Base power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists provided by System Operator, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of

conduct and confidentiality requirements; such databases and lists shall include all generation projects and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. Base Cases also include data provided by the Interconnection Customer, where applicable, to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

**Business Day** – Monday through Friday, excluding Federal Holidays.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** – The criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources and Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Resource (“CNR”)** – That portion of a Generating Facility that is interconnected to the Administered Transmission System under the Capacity Capability Interconnection Standard.

**Capacity Network Resource Capability (“CNR Capability”)** – The MW quantity associated with CNR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Resource Group Study (“CNR Group Study”)** – The study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Capacity Network Resource Interconnection Service (“CNR Interconnection Service”)** - The Interconnection Service selected by the Interconnection Customer to interconnect its Small Generating

Facility with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer's CNR Interconnection Service shall be for the megawatt amount of CNR Capability. CNR Interconnection Service does not in and of itself convey transmission service.

**Cluster Enabling Transmission Upgrade ("CETU")** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered. The CETU shall be considered part of a Generator Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study ("CRPS")** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 1.5.3.1 have been triggered.

**Cluster Interconnection Facilities Study ("CFS")** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 1.5.3.4.

**Cluster Interconnection System Impact Study ("CSIS")** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 1.5.3.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 1.5.3.3.2.2 and 1.5.3.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 1.5.3.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** – The status of a Generating Facility that has commenced generating electricity for sale, excluding electricity generated during Trial Operation.

**Commercial Operation Date** – The date on which the Generating Facility commences Commercial Operation as agreed to by the Parties pursuant to Attachment 7 to the Standard Small Generator Interconnection Agreement.

**Default** – The failure of a breaching Party to cure its breach under the Small Generator Interconnection Agreement.

**Distribution System** – The Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which Distribution Systems operate differ among areas.

**Distribution Upgrades** – The additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Small Generating Facility and render the transmission service necessary to effect the Interconnection Customer's wholesale sale of electricity in interstate commerce. Distribution Upgrades do not include Interconnection Facilities.

**Generating Facility** – The Interconnection Customer's device for the production and/or storage for later injection of electricity identified in the Interconnection Request, but shall not include the Interconnection Customer's Interconnection Facilities.

**Governmental Authority** – Any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the Interconnection Customer, the Interconnection Provider, or any Affiliate thereof.

**Initial Synchronization Date** – The date upon which the Generating Facility is initially synchronized and upon which Trial Operation begins.

**In-Service Date** – The date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities to obtain back feed power.

**Interconnecting Transmission Owner** – A Transmission Owner that owns, leases or otherwise possesses an interest in, or a Non-Incumbent Transmission Developer that is not a Participating Transmission Owner that is constructing, a portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Standard Small Generator Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Attachment 2 to the Standard Small Generator Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** – Any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Small Generating Facility with the Administered Transmission System under the Standard Small Generator Interconnection Procedures.

**Interconnection Customer’s Interconnection Facilities** shall mean all facilities and equipment, as identified in Attachment 2 of the Standard Small Generator Interconnection Agreement, that are located between the Generating Facility and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Generating Facility to the Administered Transmission System. Interconnection Customer’s Interconnection Facilities are sole use facilities.

**Interconnection Facilities** – The Interconnecting Transmission Owner’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Small Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically



interconnect the Small Generating Facility to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** – A study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Generating Facility with the Administered Transmission System. The scope of the study is defined in Section 3.5 of the Standard Small Generator Interconnection Procedures.

**Interconnection Facilities Study Agreement** – The form of agreement contained in Attachment 8 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** – A preliminary evaluation of the system impact and cost of interconnecting the Generating Facility to the Administered Transmission System, the scope of which is described in Section 3.3 of the Standard Small Generator Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and Section 3.4.

**Interconnection Feasibility Study Agreement** – The form of agreement contained in Attachment 6 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** – The Interconnection Request (a) shall mean an Interconnection Customer's request, in accordance with the Tariff, to: (i) interconnect a new Generating Facility to the Administered Transmission System as either a CNR or a NR; (ii) make a Material Modification to a proposed

Generating Facility with an outstanding Interconnection Request; (iii) increase the energy capability or capacity capability of or add energy storage capability to the Small Generating Facility above that specified in an Interconnection Request, an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission), or as established pursuant to 1.6.4 of this SGIP; (iv) make a modification to the operating characteristics of an existing Generating Facility, including its Interconnection Facilities, that is interconnected to the Administered Transmission System; (v) commence participation in the wholesale markets by an existing Generating Facility that is interconnected with the Administered Transmission System; or (vi) change from NR Interconnection Service to CNR Interconnection Service for all or part of a Generating Facility's capability. Interconnection Request shall not include a request to interconnect a Qualifying Facility (as defined by the Public Utility Regulatory Policies Act, as amended by the Energy Policy Act of 2005 and the regulations thereto), where the Qualifying Facility's owner intent is to sell 100% of the Qualifying Facility's output to its interconnected electric utility.

**Interconnection Service** – The service provided by the System Operator and the Interconnecting Transmission Owner, associated with interconnecting the Interconnection Customer's Generating Facility to the Administered Transmission System and enabling the receipt of electric energy capability and/or capacity capability from the Generating Facility at the Point of Interconnection, pursuant to the terms of the Standard Small Generator Interconnection Agreement and, if applicable, the Tariff.

**Interconnection Study** – Any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, and the Interconnection Facilities Study described in the Standard Small Generator Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** – Any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, and the Interconnection Facilities Study Agreement attached to the Standard Small Generator Interconnection Procedures.

**Interconnection System Impact Study** – An engineering study that evaluates the impact of the proposed interconnection on the safety and reliability of the Administered Transmission System and any other Affected System. The study shall identify and detail the system impacts that would result if the Generating Facility were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in

the Scoping Meeting as described in the Standard Small Generator Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 3.3 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 3.3 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 3.3 and 3.4.

**Interconnection System Impact Study Agreement** – The form of agreement contained in Attachment 7 of the Standard Small Generator Interconnection Procedures for conducting the Interconnection System Impact Study.

**Network Capability Interconnection Standard (“NC Interconnection Standard”)**– The minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Resource (“NR”)** – The portion of a Generating Facility that is interconnected to the Administered Transmission System under the Network Capability Interconnection Standard.

**Network Resource Capability (“NR Capability”)** – The MW quantity associated with NR Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Resource Interconnection Service (“NR Interconnection Service”)** – The Interconnection Service selected by the Interconnection Customer to interconnect its Generating Facility to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s NR Interconnection Service shall be solely for the megawatt amount of the NR Capability. NR Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** – Additions, modifications, and upgrades to the New England Transmission System required at or beyond the point at which the Small Generating Facility interconnects with the Administered Transmission System to accommodate the interconnection of the Small Generating Facility with the Administered Transmission System. Network Upgrades do not include Distribution Upgrades.

**Notice of Dispute** – A written notice of a dispute or claim that arises out of or in connection with the Standard Small Generator Interconnection Agreement or its performance.

**Operating Requirements** – Any operating and technical requirements that may be applicable due to System Operator or the Interconnecting Transmission Owner’s requirements, including those set forth in the Small Generator Interconnection Agreement, ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**Party**– The System Operator, Interconnecting Transmission Owner, Interconnection Customer or any combination of the above.

**Point of Interconnection** – The point where the Interconnection Facilities connect with the Administered Transmission System.

**Queue Position** -- The order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a “higher-queued” Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as “lower-queued.”

**Reasonable Efforts** – With respect to an action required to be attempted or taken by a Party under the Small Generator Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Small Generating Facility** – A Generating Facility having a maximum gross capability at or above zero degrees F of 20 MW or less.

**Stand Alone Network Upgrades** – Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Attachment 2 to the Standard Small Generator Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 3.3.2 and 3.4.3 of this SGIP.

**Study Process** – The procedure for evaluating an Interconnection Request that includes the section 3 scoping meeting, Interconnection Feasibility Study, Interconnection System Impact Study, and Interconnection Facilities Study.

**Tariff** – The System Operator's or Affected System's Tariff through which open access transmission service and Interconnection Service are offered, as filed with the Commission, and as amended or supplemented from time to time, or any successor tariff.

**Trial Operation** – The period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Generating Facility prior to Commercial Operation.

**Upgrades** – The required additions and modifications to the Administered Transmission System at or beyond the Point of Interconnection. Upgrades may be Network Upgrades or Distribution Upgrades. Upgrades do not include Interconnection Facilities.

**Description and Costs of the Small Generating Facility,  
Interconnection Facilities, and Metering Equipment**

*Equipment, including the Small Generating Facility, Interconnection Facilities, and metering equipment shall be itemized and identified as being owned by the Interconnection Customer or the Interconnecting Transmission Owner. The Interconnecting Transmission Owner will provide a best estimate itemized cost, including overheads, of its Interconnection Facilities and metering equipment, and a best estimate itemized cost of the annual operation and maintenance expenses associated with its Interconnection Facilities and metering equipment.*

I. DESCRIPTION OF MAJOR COMPONENTS

A. Small Generating Facility

(1) Description of Small Generating Facility.

[insert]

(2) The Small Generating Facility shall receive:

\_\_\_\_ Network Resource Interconnection Service for the NR Capability at a level not to exceed [insert gross and net at or above 50 degrees F] MW for Summer, and [insert gross and net at or above 0 degrees F] MW for Winter.

\_\_\_\_ Capacity Network Resource Interconnection Service for: (a)(i) the NR Capability at a level not to exceed [insert gross and net at or above 50 degrees F] MW for Summer and [insert gross and net at or above 0 degrees F] MW for Winter; and (ii) the CNR Capability at [insert net] MW for Summer and [insert net] MW for Winter, which shall not exceed [insert the maximum net MW electrical output of the Generating Facility at an ambient temperature at or above 90 degrees F for summer and at or above 20 degrees F for winter].

- (3) Detailed Description of Small Generating Facility and Generator Step-Up Transformer, if applicable:

Generator Data	
Number of Generators	
Manufacturer	
Model	
Designation of Generator(s)	
Excitation System Manufacturer	
Excitation System Model	
Voltage Regulator Manufacturer	
Voltage Regulator Model	
Generator Ratings	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 90 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 50 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above 20 Degrees F	
Greatest Unit Gross and Net MW Output at Ambient Temperature at or above zero Degrees F	
Station Service Load For Each Unit	
Overexcited Reactive Power at Rated MVA and Rated Power Factor	
Underexcited Reactive Power at Rated MVA and Rated Power Factor	

Generator Short Circuit and Stability Data	
Generator MVA rating	
Generator AC Resistance	
Subtransient Reactance (saturated)	
Subtransient Reactance (unsaturated)	
Transient Reactance (saturated)	
Negative sequence reactance	
Transformer Data	
Number of units	
Self Cooled Rating	
Maximum Rating	
Winding Connection (LV/LV/HV)	
Fixed Taps	
Z1 primary to secondary at self cooled rating	
Z1 primary to tertiary at self cooled rating	
Z1 secondary to tertiary at self cooled rating	
Positive Sequence X/R ratio primary to secondary	
Z0 primary to secondary at self cooled rating	
Z0 primary to tertiary at self cooled rating	
Z0 secondary to tertiary at self cooled rating	
Zero Sequence X/R ratio primary to tertiary	



B. Interconnection Facilities

[*insert*]

C. Metering Equipment

[*insert*]

D. Other Components

[*insert*]

II. INTERCONNECTION EQUIPMENT OWNERSHIP, OPERATION AND MAINTENANCE

A. Point of Change of Ownership; Point of Interconnection

[*insert*]

B. Description of Responsibilities

[*insert*]

III. PRICING ESTIMATES

A. Interconnection Facilities

[*insert*]

B. Metering Equipment

[*insert*]

C. Operation and Maintenance

[*insert*]

### **Attachment 3**

#### **One-line Diagram Depicting the Small Generating Facility, Interconnection Facilities, Metering Equipment, and Upgrades**

*[insert]*

### Milestones

- 1) **Milestones and Other Requirements:** The description and entries listed in the following table establish the required Milestones in accordance with the provisions of the SGIP and this SGIA. The referenced section of the SGIP or article of the SGIA should be reviewed to understand the requirements of each milestone.

Item No.	Milestone Description	Responsible Party	Date	SGIP/SGIA Reference
1	Submit updated data “as purchased”	Interconnection Customer	No later than 180 Calendar Days prior to Initial Synchronization Date	
2	Submit supplemental and/or updated data “as built/as-tested”	Interconnection Customer	Prior to Commercial Operation Date	
3	Provide quarterly written progress reports	Interconnection Customer and Interconnecting Transmission Owner	15 Calendar Days after the end of each quarter beginning the quarter that includes the date for Milestone #3 below and ending when the entire Small Generating Facility and all	

			required Interconnection Facilities and Network Upgrades are in place	
4	Deliver to Transmission Owner “as built” drawings, information and documents regarding Interconnection Customer’s Interconnection Facility	Interconnection Customer	If requested, within 120 Calendar Days after Commercial Operation date	

**2) Milestones Applicable If Facilities Study Has Been Waived by Interconnection Customer:**

<b>Item No.</b>	<b>Milestone Description</b>	<b>Responsible Party</b>	<b>Date</b>	<b>SGIP/SGIA Reference</b>
1	Siting approval for the Generating Facility and Interconnection Facilities	Interconnection Customer	As agreed to by the Parties	SGIP § 3.4.5(i)
2	Engineering of Interconnection Facilities approved by Interconnecting Transmission Owner	Interconnection Customer	As agreed to by the Parties	SGIP § 3.4.5(ii)
3	Commit to the ordering of long lead time material	Interconnection Customer	As agreed to by the Parties	SGIP § 3.4.5(iii)

	for Interconnection Facilities and system upgrades			
4	In-Service Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	
5	Initial Synchronization Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	SGIP § 3.4.5(iv)
6	Commercial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	SGIP § 3.4.5(v)

3) **Milestones Applicable Solely for CNR Interconnection Service.** In addition to the Milestones above, the following Milestones apply to Interconnection Customers requesting CNR Interconnection Service:

Item #	Milestone	Responsible Party	Date	SGIP/SGIA Reference
1	Submit necessary requests for participation in the Forward Capacity Auction associated with the Generating Facility's requested Commercial Operation Date, in accordance with Section III.13 of the Tariff	Interconnection Customer		1.7.1.3(i)
2	Participate in a CNR Group Study	Interconnection Customer; System Operator		1.7.1.3(ii)

3	Qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff	Interconnection Customer		1.7.1.3(iii)
4	Complete a re-study of the applicable Interconnection Study to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request based on the results of the Forward Capacity Auction, Reconfiguration Auction or bilateral transaction through which the Interconnection Customer received a Capacity Supply Obligation	System Operator		1.7.1.3(iv)

**Additional Operating Requirements for the  
New England Transmission System and Affected Systems Needed to Support  
the Interconnection Customer's Needs**

*The Interconnecting Transmission Owner shall also provide requirements that must be met by the Interconnection Customer prior to initiating parallel operation with the New England Transmission System.*

**I. OPERATING REQUIREMENTS**

*[Insert]*

**Interconnecting Transmission Owner's  
Description of its Upgrades  
and Best Estimate of Upgrade Costs**

*The Interconnecting Transmission Owner shall describe Upgrades and provide an itemized best estimate of the cost, including overheads, of the Upgrades and annual operation and maintenance expenses associated with such Upgrades. The Interconnecting Transmission Owner shall functionalize Upgrade costs and annual expenses as either transmission or distribution related.*

I. DESCRIPTION OF UPGRADES

A. Distribution Upgrades

[Insert]

B. Network Upgrades

[Insert]

(1) Stand Alone Network Upgrades

(2) Other Network Upgrades

C. Affected System Upgrades

[Insert]

D. Contingency Upgrades

(1) Long Lead Facility-Related Upgrades. The Interconnection Customer's Small Generating Facility is associated with a Long Lead Facility, in accordance with Section 3.2.3 of the LGIP. Pursuant to Section 4.1 of the LGIP, the Interconnection Customer shall be responsible for the following upgrades in the event that the Long Lead Facility



achieves Commercial Operation and obtains a Capacity Supply Obligation in accordance with Section III.13.1 of the Tariff:

*[insert list of upgrades]*

If the Interconnection Customer fails to cause these upgrades to be in-service prior to the commencement of the Long Lead Facility's Capacity Commitment Period, the Interconnection Customer shall be deemed to be in Breach of this SGIA in accordance with Article 7, and the System Operator will initiate all necessary steps to terminate this SGIA, in accordance with Article 3.

(2) Other Contingency Upgrades. *[e.g., list of upgrades associated with higher queued Interconnection Requests with SGIAs prior to this SGIA and any other contingency upgrades that the Parties may deem necessary for the interconnection of the Small Generating Facility.]*

E. Post-Forward Capacity Auction Re-study Upgrade Obligations.

*[Insert any changes in upgrade obligations that result from re-study conducted post receiving a Capacity Supply Obligation in accordance with the Tariff.]*

**Commercial Operation Date**

This Attachment 7 is a part of the SGIA between System Operator, Interconnecting Transmission Owner and Interconnection Customer.

[Date]

[Interconnecting Transmission Owner; Address]

Generator Interconnections  
Transmission Planning Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Re: \_\_\_\_\_ Small Generating Facility

Dear \_\_\_\_\_:

On [Date] [Interconnection Customer] has completed Trial Operation of Unit No. \_\_\_\_.  
This letter confirms that [Interconnection Customer] commenced commercial operation of Unit No. \_\_\_\_ at the Small Generating Facility, effective as of [Date plus one day].

Thank you.

[Signature]

[Interconnection Customer Representative]

## **SCHEDULE 25**

### **ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION PROCEDURES**

## **TABLE OF CONTENTS**

SECTION 1.	DEFINITIONS
SECTION 2.	SCOPE, APPLICATION AND TIME REQUIREMENTS
2.1	Application of Elective Transmission Upgrade Interconnection Procedures
2.2	Comparability
2.3	Base Case Data
2.4	No Applicability to Transmission Service
2.5	Treatment of Elective Transmission Upgrades for Transmission, Operations, and Scheduling Purposes
2.6	Time Requirements
SECTION 3.	INTERCONNECTION REQUESTS
3.1	General
3.2	Type of Interconnection Services and Long Lead Time Facility Treatment
3.3	Valid Interconnection Request
3.4	OASIS Posting
3.5	Coordination with Affected Systems
3.6	Withdrawal
SECTION 4.	QUEUE POSITION
4.1	General
4.2	Reserved
4.3	Transferability of Queue Position
4.4	Modifications
SECTION 5.	PROCEDURES FOR TRANSITION
5.1	Queue Position for Pending Requests
5.2	Reserved
5.3	New System Operator or Interconnecting Transmission Owner
SECTION 6.	INTERCONNECTION FEASIBILITY STUDY
6.1	Interconnection Feasibility Study Agreement
6.2	Scope of Interconnection Feasibility Study
6.3	Interconnection Feasibility Study Procedures
6.4	Re-Study
SECTION 7.	INTERCONNECTION SYSTEM IMPACT STUDY

7.1	Interconnection System Impact Study Agreement
7.2	Execution of Interconnection System Impact Study Agreement
7.3	Scope of Interconnection System Impact Study
7.4	Interconnection System Impact Study Procedures
7.5	Meeting with Parties
7.6	Re-Study
7.7	Operational Readiness
SECTION 8.	INTERCONNECTION FACILITIES STUDY
8.1	Interconnection Facilities Study Agreement
8.2	Scope of Interconnection Facilities Study
8.3	Interconnection Facilities Study Procedures
8.4	Meeting with Parties
8.5	Re-Study
SECTION 9.	ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT
SECTION 10.	OPTIONAL INTERCONNECTION STUDY
10.1	Optional Interconnection Study Agreement
10.2	Scope of Optional Interconnection Study
10.3	Optional Interconnection Study Procedures
10.4	Meeting with Parties
10.5	Interconnection Agreement Developed Based on Optional Interconnection Study
SECTION 11.	ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT (ETU IA)
11.1	Tender
11.2	Negotiation
11.3	Evidence to be Provided by Interconnection Customer; Execution and Filing of ETU IA
11.4	Commencement of Interconnection Activities
11.5	Other Regulatory Arrangements
SECTION 12.	CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES
12.1	Schedule
12.2	Construction Sequencing
SECTION 13.	MISCELLANEOUS
13.1	Confidentiality

- 13.2 Delegation of Responsibility
- 13.3 Obligation for Study Costs
- 13.4 Third Parties Conducting Studies
- 13.5 Disputes
- 13.6 Local Furnishing Bonds

## **APPENDICES TO ETU INTERCONNECTION PROCEDURES**

APPENDIX 1 INTERCONNECTION REQUEST

APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT

APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT

APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT

APPENDIX 6 ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT

## **SECTION I. DEFINITIONS.**

The definitions contained in this section are intended to apply in the context of the Elective Transmission Upgrade interconnection process provided for in this Schedule 25 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of Elective Transmission Upgrade interconnections under this Schedule 25. Capitalized terms in Schedule 25 that are not defined in this Section I shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF and the Non-PTF.

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.



**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**Base Case** shall have the meaning specified in Section 2.3.

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability databases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Elective Transmission Upgrade Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Elective Transmission Upgrade Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resource or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Import Capability (“CNI Capability”)** shall mean the MW quantity associated with CNI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Import Interconnection Service (“CNI Interconnection Service”)** shall mean, for an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s Capacity Network Import Interconnection Service shall be for the megawatt of Capacity Network Import Capability. Capacity Network Import Interconnection Service does not in and of itself convey transmission service.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of an ETU Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of an Elective Transmission Upgrade that has commenced transmitting electricity, excluding performance during Trial Operation.

**Commercial Operation Date** shall mean the date on which the Elective Transmission Upgrade commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Elective Transmission Upgrade Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise. Confidential Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Elective Transmission Upgrade Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby

generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Elective Transmission Upgrade. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Elective Transmission Upgrade Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Elective Transmission Upgrade ("ETU")** shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.

**Elective Transmission Upgrade Interconnection Agreement ("ETU IA")** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade, that is included in this Schedule 25 to Section II of the Tariff.

**Elective Transmission Upgrade Interconnection Procedures ("ETU IP")** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade that are included in this Schedule 25 to Section II of the Tariff.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the

security of, or damage to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Elective Transmission Upgrade or Interconnection Customer's Interconnection Facilities.

**Engineering & Procurement ("E&P") Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**External Elective Transmission Upgrade ("External ETU")** shall mean an Elective Transmission Upgrade that interconnects the New England Control Area with another Control Area.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of Section II to the Tariff.

**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such

term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities.

**Interconnecting Transmission Owner** shall mean Transmission Owner that owns, leases or otherwise possesses an interest in the portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Elective Transmission Upgrade Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator, and may refer to one or more Transmission Owners in the case of an Internal Elective Transmission Upgrade.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Elective Transmission Upgrade with the Administered Transmission System under the Elective Transmission Upgrade Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Elective Transmission Upgrade Interconnection Agreement, that are separate and distinct from the Elective Transmission Upgrade and are located between the Elective Transmission Upgrade and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Elective Transmission Upgrade and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Elective Transmission Upgrade with the Administered Transmission System. The scope of the study is defined in Section 8 of the Elective Transmission Upgrade Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Elective Transmission Upgrade to the Administered Transmission System, the scope of which is described in Section 6 of the Elective Transmission Upgrade Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the

Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Elective Transmission Upgrade Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Elective Transmission Upgrade to the Administered Transmission System; (ii) make a Material Modification to an Elective Transmission Upgrade with an outstanding Interconnection Request; (iii) increase the capability of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System; (iv) make a Material Modification to the design or operating characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected with the Administered Transmission System; or (v) change from NI Interconnection Service to CNI Interconnection Service for an Elective Transmission Upgrade that is eligible to request such services. Interconnection Request shall not include a request to interconnect to a transmission facility that is not part of the Administered Transmission System.

**Interconnection Service** shall mean the right to interconnect the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System at the Point of Interconnection pursuant to the terms of the Elective Transmission Upgrade Interconnection Agreement and, if applicable, the Tariff. For an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, Interconnection Service shall include Capacity Network Import Interconnection Service or Network Import Interconnection Service.



**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional Interconnection Study described in the Elective Transmission Upgrade Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to Elective Transmission Upgrade Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection of an Elective Transmission Upgrade on the safety and reliability of the Administered Transmission System and any other Affected System. The study shall identify and detail the system impacts that would result if the Elective Transmission Upgrade were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Elective Transmission Upgrade Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection System Impact Study.

**Internal Elective Transmission Upgrade (“Internal ETU”)** shall mean an Elective Transmission Upgrade that interconnects solely within the New England Control Area.

**IRS** shall mean the Internal Revenue Service.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff, respectively,

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party’s performance, or non-performance of its obligations under the Elective Transmission Upgrade Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2(a) of the Tariff.

**Material Modification** shall mean: (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer, that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Trial Operation Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer’s control; (iv) except as provided in Section 3.2.3.4, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed pursuant to the Elective Transmission Upgrade Interconnection Agreement, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard (“NC Interconnection Standard”)** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Import Capability (“NI Capability”)** shall mean the MW quantity associated with NI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Import Interconnection Service (“NI Interconnection Service”)** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer’s Network Import Interconnection Service shall be solely for the megawatt amount of the Network Import Capability. Network Import Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Elective Transmission Upgrade to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Elective Transmission Upgrade Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities connect to the Interconnecting Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point(s), as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric systems, that impact the Administered Transmission System. References to a "higher-queued" Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as "lower-queued."

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Elective Transmission Upgrade Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed

appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for the Elective Transmission Upgrade's terminal locations at the Point of Interconnection within the New England Control Area; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property where the Elective Transmission Upgrade's terminal locations will be located at the Point of Interconnection within the New England Control Area.

**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Elective Transmission Upgrade Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this ETU IP.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or

other electrical disturbances occurring at the Elective Transmission Upgrade and (2) the Elective Transmission Upgrade from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Elective Transmission Upgrade prior to Commercial Operation.

**Trial Operation Date** shall mean the date upon which the Elective Transmission Upgrade begins Trial Operation.

## **SECTION 2. SCOPE, APPLICATION AND TIME REQUIREMENTS.**

### **2.1 Application of Elective Transmission Upgrade Interconnection Procedures.**

The ETU IP and ETU IA shall apply to Interconnection Requests pertaining to Elective Transmission Upgrades. Except as expressly provided in the ETU IP and ETU IA, nothing in the ETU IP or ETU IA shall be construed to limit the authority or obligations that the Interconnecting Transmission Owner or System Operator, as applicable, has with regard to ISO New England Operating Documents.

### **2.2 Comparability.**

The System Operator shall receive, process and analyze all Interconnection Requests in a timely manner as set forth in this ETU IP. The System Operator and Interconnecting Transmission Owner will use the same Reasonable Efforts in processing and analyzing Interconnection Requests from all Interconnection Customers, whether the ETU is owned by the Interconnecting Transmission Owner, its subsidiaries or Affiliates, or others.

### **2.3 Base Case Data.**

System Operator, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall provide Base Case power flow, short circuit and stability databases, including all underlying assumptions, and contingency lists upon request to the Interconnection Customer and any third party consultant retained by the Interconnection Customer. For the purpose of this provision, Base Case Data may include the electromagnetic transient network model that does not include proprietary

electromagnetic transient equipment models. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy as well as any other applicable requirement under Applicable Laws and Regulations regulating disclosure or confidentiality of such information. System Operator is permitted to require that the Interconnection Customer or third party consultant sign a confidentiality agreement before the release of information governed by Section 13.1 or the ISO New England Information Policy, or the release of any other information that is commercially sensitive or Critical Energy Infrastructure Information. Such databases and lists, hereinafter referred to as Base Cases, shall include all generation and transmission projects that are proposed for the New England Transmission System and any Affected System and for which a transmission expansion plan has been submitted and approved by the applicable authority and which, in the sole judgment of the System Operator, may have an impact on the Interconnection Request. The Base Cases shall also include generation projects that are not participating in the System Operator's interconnection process, but are expected to achieve approval pursuant to Section I.3.9 of the Tariff within 90 days from the date of the creation of the Base Cases and for which steady state, short circuit and stability models for the generation projects and any associated system upgrades have been provided to the System Operator. The Interconnection Customer, where applicable, shall provide Base Case Data to the Interconnecting Transmission Owner and System Operator to facilitate required Interconnection Studies.

## **2.4 No Applicability to Transmission Service.**

Nothing in this ETU IP shall constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity service, energy service or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

## **2.5 Treatment of Elective Transmission Upgrades for Transmission, Operations, and Scheduling Purposes.**

All ETUs must be categorized as PTF, Non-PTF, MTF or OTF. External ETUs will be treated for transmission, operations and scheduling purposes by the System Operator in a manner consistent with similarly situated PTF, Non-PTF, MTF or OTF under the Tariff. Internal ETUs will be operated and scheduled by the System Operator without recognition of physical transmission rights.

## **2.6 Time Requirements.**

Parties that must perform a specific obligation under a provision of the ETU IP or ETU IA within a specified time period shall use Reasonable Efforts to complete such obligation within the applicable time period. A Party may, in the exercise of reasonable discretion and within the time period set forth by the applicable procedure or agreement, request that the relevant Party consent to a mutually agreeable alternative time schedule, such consent not to be unreasonably withheld.

### **SECTION 3. INTERCONNECTION REQUESTS.**

#### **3.1 General.**

To initiate an Interconnection Request, an Interconnection Customer must comply with all of the requirements set forth in Section 3.3.1. The Interconnection Customer shall submit a separate Interconnection Request(s) for each Elective Transmission Upgrade of a: (a) specific technology to be interconnected at a designated Point of Interconnection for a specific capability; or (b) specific objective to facilitate the operation of specific Generating Facility(ies), including achieving CNR Interconnection Service, to increase transfer capability between two specific endpoints, or another specific and clearly defined discrete objective that the ISO, at its sole discretion, determines that it is appropriate to propose in a single Interconnection Request. The Interconnection Customer must comply with the requirements specified in Section 3.3.1 for each Interconnection Request even when more than one request is submitted.

Within three (3) Business Days after its receipt of a valid Interconnection Request, System Operator shall submit a copy of the Interconnection Request to Interconnecting Transmission Owner.

At Interconnection Customer's option, System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, will identify alternative Point(s) of Interconnection and configurations at the Scoping Meeting to evaluate in this process and attempt to eliminate alternatives in a reasonable fashion given resources and information available. Interconnection Customer will select the definitive Point(s) of Interconnection to be studied no later than the execution of the Interconnection Feasibility Study Agreement, or the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.



All deposits that must be submitted to the System Operator under this ETU IP, must be delivered to the System Operator's bank account by electronic transfer within the period specified in the respective provision. A deposit will not be considered received until it is in the System Operator's bank account.

### **3.2 Type of Interconnection Services and Long Lead Time Facility Treatment.**

Interconnection Service for all Elective Transmission Upgrades is the right to interconnect the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System at the Point of Interconnection pursuant to the terms of the Elective Transmission Upgrade Interconnection Agreement and, if applicable, the Tariff. For an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility, Interconnection Service shall include CNI Interconnection Service or NI Interconnection Service. An External ETU Merchant Transmission Facility or Other Transmission Facility is a controllable facility if it employs technology that, in the judgment of the System Operator, enables full control over the direction and amount of power flow on the Elective Transmission Upgrade without adjusting the dispatch of resources within or outside of the New England Control Area, and can be scheduled, curtailed and operated independently from any other interface that interconnects the New England Control Area with another Control Area.

An External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility seeking to import capacity and/or energy into the New England Control Area must select either CNI Interconnection Service or NI Interconnection Service at the time the Interconnection Request is submitted, as described in Sections 3.2.1 and 3.2.2 below. An Interconnection Customer that meets the requirements to obtain CNI Interconnection Service shall obtain NI Interconnection Service up to the NI Capability upon completion of all requirements for NI Interconnection Service, including all necessary upgrades. Upon completion of all requirements for the CNI Interconnection Service, the Interconnection Customer shall also receive CNI Interconnection Service for CNI Capability. An Interconnection Customer that meets the requirements to obtain NI Interconnection Service shall receive NI Interconnection Service for the Interconnection Customer's NI Capability. At the time the Interconnection Request is submitted, the Interconnection Customer may also request Long Lead Facility treatment in accordance with Section 3.2.3.

Interconnection Studies for Elective Transmission Upgrades shall assure that the Interconnection Customer's Elective Transmission Upgrade interconnects to the Administered Transmission System consistent with the objectives specified in the ETU Interconnection Request and in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Elective Transmission Upgrade.

### **3.2.1 Capacity Network Import Interconnection Service.**

#### **3.2.1.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect the External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility under the CC Interconnection Standard. CNI Interconnection Service allows the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility to enable the participation of an Import Capacity Resource in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the CNI Capability or as otherwise provided in the Tariff.

#### **3.2.1.2 The Studies.**

All Interconnection Studies for CNI Interconnection Service shall assure that the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the facility. The CNR Group Study for CNI Interconnection Service shall assure that the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility can be interconnected in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resources and Elective Transmission Upgrades with CNI Interconnection Service, in accordance with the CC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load

conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

### **3.2.1.3 Milestones for Capacity Network Import Interconnection Service.**

In addition to the requirements set forth in this ETU IP, an Interconnection Customer with an Interconnection Request for CNI Interconnection Service or its counterparty (i.e., Import Capacity Resource) as required shall complete the following milestones prior to receiving CNI Interconnection Service for the CNI Capability, such milestones to be specified in Appendix B of the ETU IA, as either completed or to be completed: (i) submit the necessary requests for participation in the Forward Capacity Auction associated with the Elective Transmission Upgrade's Commercial Operation Date (except as modified pursuant to Sections 3.2.3 or 4.4 of the ETU IP) in accordance with the provisions of Section III.13 of the Tariff; (ii) participate in a CNR Group Study for the Forward Capacity Auction associated with the requested Elective Transmission Upgrade's Commercial Operation Date; (iii) qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff; and (iv) complete a re-study of the applicable Interconnection Study and CNR Group Study after the Forward Capacity Auction, Reconfiguration Auction, or bilateral transaction through which the Interconnection Customer's counterparty received a Capacity Supply Obligation to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request. The re-study shall include those CNR Interconnection Service and CNI Interconnection Service Interconnection Requests with a higher Queue Position that cleared and shall exclude any upgrades that are no longer necessary as a result of existing capacity that will be retired as of the start of the Capacity Commitment Period for which the resource of the Interconnection Customer's counterparty received a Capacity Supply Obligation. With respect to (iv) above, if an Interconnection Study Agreement has been executed, the Interconnection Study associated with the Interconnection Study Agreement shall include the necessary analysis that would otherwise have been performed in a re-study. If the original Interconnection Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Study Agreement. If an ETU IA has been either executed or filed with the Commission in unexecuted form, then the last Interconnection Study completed for the Interconnection Customer under this ETU IP shall be subject to re-study. The Appendices to the ETU IA shall be amended (pursuant to Article 30 of the ETU IA) to reflect CNI Capability and the results of the re-study.

### **3.2.2 Network Import Interconnection Service.**

#### **3.2.2.1 The Product.**

The System Operator must conduct the necessary studies in conjunction with the Interconnecting Transmission Owner, and with other Affected Parties as appropriate and in accordance with applicable codes of conduct and confidentiality requirements, and the Interconnecting Transmission Owner and other Affected Parties as appropriate must construct the Network Upgrades needed to interconnect a controllable Merchant Transmission Facility or Other Transmission Facility External ETU under the NC Interconnection Standard. Notwithstanding the above, the portion of a controllable Merchant Transmission Facility or Other Transmission Facility External ETU that has been interconnected under the NC Interconnection Standard cannot be used to support an Import Capacity Resource's participation in the Forward Capacity Market under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNI Interconnection Service.

#### **3.2.2.2 The Studies.**

The Interconnection Studies for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall assure that the Interconnection Customer's External ETU satisfies the minimum characteristics required to interconnect in a manner that avoids any significant adverse effect on reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the unit, in accordance with the NC Interconnection Standard and as detailed in the ISO New England Planning Procedures. The System Operator, in coordination with the Interconnecting Transmission Owner, may also study the New England Transmission System under non-peak load conditions. However, upon request by the Interconnection Customer, the System Operator and as appropriate the Interconnecting Transmission Owner must explain in writing to the Interconnection Customer why the study of non-peak load conditions is required for reliability purposes.

#### **3.2.2.3 Milestones for Network Import Interconnection Service.**

An Interconnection Customer with an Interconnection Request for NI Interconnection Service shall complete the requirements in this ETU IP prior to receiving NI Interconnection Service.

### **3.2.3 Long Lead Time Facility Treatment.**

#### **3.2.3.1 Treatment of Long Lead Facility.**

Long Lead Facilities receive the treatment described herein in connection with the associated request of the Interconnection Customer for CNR Interconnection Service for its Large Generating Facility or CNI Interconnection Service for its External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility. Long Lead Facility treatment provides for the Interconnection Customer's Generating Facility or controllable Merchant Transmission Facility or Other Transmission Facility External ETU, after the completion of the Interconnection System Impact Study, to be modeled in the Base Cases for the next CNR Group Study to determine whether the Long Lead Facility would have qualified or enabled the qualification of an Import Capacity Resource to participate in the Forward Capacity Auction associated with that CNR Group Study, in accordance with Section III.13.1.2 of the Tariff, but for the Long Lead Facility's development cycle (which shall include development of required transmission upgrades). If the Long Lead Facility is deemed to qualify or have enabled an associated Import Capacity Resource to qualify, the Long Lead Facility shall be included in the re-study pursuant to Section 3.2.1.3(iv) in order to determine the facilities and upgrades that would be necessary in order to accommodate the Interconnection Request of the Long Lead Facility, and for which costs the Interconnection Customer must be responsible. In order to maintain Long Lead Facility status, the Interconnection Customer must commit to the completion of these facilities and upgrades in time to allow the Long Lead Facility to achieve its Commercial Operation Date by the start of the associated Capacity Commitment Period. In addition, the Long Lead Facility will be treated as a New Generating Capacity Resource in the case of a Generating Facility or as if an Import Capacity Resource associated with the Long Lead Facility cleared in the case of an External ETU for the sole purpose of inclusion of the Long Lead Facility in the CNR Group Studies for the Forward Capacity Auctions that precede the Forward Capacity Auction for the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation. If an earlier-queued Generating Facility seeking CNR Interconnection Service or an Import Capacity Resource associated with an Elective Transmission Upgrade that is seeking CNI Interconnection Service obtains a Capacity Supply Obligation in a Forward Capacity Auction prior to or simultaneous with the Forward Capacity Auction in which the Long Lead Facility or its contractual counterparty in the case of an Elective Transmission Upgrade obtains a Capacity Supply Obligation, the Long Lead Facility will be re-studied in order to determine whether any additional facilities and upgrades to those identified prior to the CNR Group Study must be completed, at the Interconnection Customer's cost, prior to its Commercial Operation Date. A Long Lead Facility's cost responsibility for the facilities necessary to accommodate the Interconnection Request shall not be impacted by a Generating Facility or an External ETU with a Queue Position lower than the Long Lead

Facility or its counterparty in the case of an External ETU that clears in a Forward Capacity Auction, in accordance with Section III.13.2 of the Tariff, prior to the clearance of the Long Lead Facility.

### **3.2.3.2 Request for Long Lead Facility Treatment.**

An Interconnection Customer requesting CNR Interconnection Service for its proposed Generating Facility or CNI Interconnection Service for its proposed controllable Merchant Transmission Facility or Other Transmission Facility External ETU, which the Interconnection Customer projects to have a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) may elect or request Long Lead Facility treatment in the following manner:

**(a)** An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service of 100 MW or more may elect Long Lead Facility treatment at the time the Interconnection Request is submitted, together with the critical path schedule and deposits required in Section 3.2.3.3.

**(b)** An Interconnection Customer proposing a Generating Facility or a controllable Merchant Transmission Facility or Other Transmission Facility External ETU with a requested CNR Interconnection Service or CNI Interconnection Service under 100 MW at may request Long Lead Facility treatment by submitting a written request to the System Operator for its review and approval, explaining why the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU cannot achieve Commercial Operation by the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for Long Lead Facility treatment is made), together with the critical path schedule and deposits required in Section 3.2.3.3. In reviewing the request, the System Operator shall evaluate the feasibility of the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU achieving Commercial Operation to meet an earlier Capacity Commitment Period based on the information provided in the request and the critical path schedule submitted pursuant to Section 3.2.3.3, in a manner similar to that performed under Section III.13.3.2 of the Tariff. Within forty-five (45) Business Days after its receipt of the request for Long Lead Facility treatment, the System Operator shall notify the Interconnection Customer in writing whether the request has been granted or denied. If

the System Operator determines that the Generating Facility or the controllable Merchant Transmission Facility or Other Transmission Facility External ETU can achieve a Commercial Operation Date prior to the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction, the Interconnection Customer's request shall be denied. The dispute resolution provisions of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU are not available for disputes or claims associated with the ISO's determination to deny an Interconnection Customer's request for Long Lead Facility treatment.

(c) An Interconnection Customer that did not request Long Lead Facility treatment at the time the Interconnection Request was submitted, may thereafter submit a request for treatment as a Long Lead Facility, together with the critical path schedule and deposits required in Section 3.2.3.3 and, if applicable, a request for an extension of the Commercial Operation Date specified in the Interconnection Request in accordance with Sections 4.4.4 and 4.4.5. A request for Long Lead Facility treatment that is submitted after the initial Interconnection Request will not be eligible to participate in any Forward Capacity Auction prior to the Forward Capacity Auction associated with the extended Commercial Operation Date. The Long Lead Facility will be modeled in the Base Cases for the CNR Study Group associated with the near term Forward Capacity Auction unless that CNR Study Group is underway, in which case the Long Lead Facility will be modeled in the next CNR Study Group.

### **3.2.3.3 Critical Path Schedule and Deposits for Long Lead Facility Treatment.**

At the time an Interconnection Customer submits an election or request for Long Lead Facility treatment, the Interconnection Customer must submit, together with the request:

**(1) Critical Path Schedule.** A critical path schedule, in writing, for the Long Lead Facility (with a development cycle that would not be completed until after the beginning of the Capacity Commitment Period associated with the next Forward Capacity Auction (after the election for the Long Lead Facility is made) that meets the requirements set forth in Section III.13.1.1.2.2.2 of the Tariff. The Interconnection Customer must submit annually, in writing, an updated critical path schedule to the System Operator by the closing deadline of each New Capacity Show of Interest Submission Window that precedes the Forward Capacity Auction associated with the Capacity Commitment Period by which the Long Lead Facility is expected to have achieved Commercial Operation, prior to the inclusion of the Long Lead Facility in the Base Case for the

CNR Group Study associated with the corresponding New Capacity Show of Interest Submission Window. With its annual update, for each critical path schedule milestone achieved since the submission of the previous critical path schedule update, the Interconnection Customer must include in the critical path update documentation demonstrating that the milestone has been achieved by the date indicated and as otherwise described in the critical path schedule.

## **(2) Long Lead Facility Deposits.**

**(a) Deposits.** In addition to the deposits required elsewhere in the LGIP in the case of a Generating Facility or the ETUP IP for External ETU, at the time of its request for Long Lead Facility treatment, in accordance with Section 3.2.3.3, and by each deadline for which a New Generating Capacity Resource is required to provide financial assurance under Section III.13.1.9.1 of the Tariff, the Interconnection Customer must provide a separate deposit in the amount of  $0.25 * (\text{Forward Capacity Auction Starting Price } (\$/\text{kW-mo})/2) * \text{requested CNR Capability or CNI Capability}$ . For each calculation of the deposit, the System Operator shall use the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction at the time of that calculation, pursuant to Section III.13.2.4 of the Tariff, or the Forward Capacity Auction Starting Price for the previous Forward Capacity Auction in the case where the Forward Capacity Auction Starting Price in effect for the upcoming Forward Capacity Auction has not yet been calculated. The total amount of deposits shall not exceed the Non-Commercial Capacity Financial Assurance Amount that the Long Lead Facility would be required to provide if the Long Lead Facility or its counterparty cleared in the upcoming Forward Capacity Auction, in accordance with Section III.13.1.9.1 of the Tariff. The Long Lead Facility deposits will be fully refunded (with interest to be calculated in accordance with Section 3.6) (i) if the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within thirty (30) Calendar Days of the Scoping Meeting or of the completion of the System Impact Study (including restudy of the System Impact Study), pursuant to Section 7, or (ii) once the Long Lead Facility or its counterparty clears in a Forward Capacity Auction.

**(b) Reductions.** Ten (10) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) after the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear in the Forward Capacity Auction



that follows the first Forward Capacity Auction for which the Long Lead Facility or its counterparty could qualify based on the Commercial Operation Date specified in the initial critical path schedule for the Long Lead Facility. An additional five (5) percent of the Long Lead Facility deposits collected pursuant to Section 3.2.3.3(2)(a) shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request (except as provided in Section 3.2.3.3(2)(a)) following each subsequent Forward Capacity Auction in which the Long Lead Facility or its counterparty fails to qualify or qualifies and fails to clear such Forward Capacity Auction, not to exceed the maximum period allowed under Sections 3.3.1, 4.4.4 and 4.4.5. The non-refundable portions of the deposits shall be credited to the revenue requirements under Schedule 1 of Section IV of the Tariff.

#### **3.2.3.4 Withdrawal and Refunds After Expenditures for Upgrades.**

An Interconnection Customer that provides documentation in the critical path schedule update to be submitted in accordance with Section 3.2.3.3(1), showing expenditures of the required amounts for upgrades identified in the Interconnection Studies for the Long Lead Facility, may submit a withdrawal of the Interconnection Request for the Long Lead Facility, in accordance with Section 3.6, at any time up to thirty (30) Calendar Days, after the Long Lead Facility's or its counterparty's failure to clear in any Forward Capacity Auction. In such instance, the Interconnection Customer shall receive a refund from the System Operator of the Long Lead Facility deposits (with interest to be calculated in accordance with Section 3.6) as adjusted pursuant to 3.2.3.3(2), if appropriate, and from the Interconnecting Transmission Owner a refund of the payments for the upgrades that exceed the costs incurred by the Interconnecting Transmission Owner. If the Interconnection Customer withdraws only its election or request for Long Lead Facility treatment, such withdrawal will be considered a Material Modification and the Long Lead Facility will lose its Queue Position unless its withdrawal occurs within one of the thirty (30)-day periods described in Section 3.2.3.3(2) of the LGIP in the case of a Generating Facility or the ETU IP for an External ETU.

#### **3.2.3.5 Additional Requirements to Maintain Long Lead Facility Treatment.**

An Interconnection Customer with a Long Lead Facility must begin payment as required by the transmission expenditure schedule for the transmission upgrade costs that have been identified in the pertinent Interconnection Studies. The Interconnection Request for CNI Interconnection Service shall be deemed withdrawn under Section 3.6 if the Interconnection Customer fails to comply with the requirements for Long Lead Facility treatment, including the milestones specified in Section 3.2.1.4. In

this circumstance, the conditions specified in an Interconnection Agreement for a Generating Facility seeking CNR Interconnection Service or External ETU seeking CNI Interconnection Service that had an Interconnection Request of a Queue Position lower than the Long Lead Facility, but cleared (in the case of the Elective Transmission Upgrade, the Import Capacity Resource) in a Forward Capacity Auction prior to the Long Lead Facility, shall be removed.

### **3.2.3.6 Participation in Earlier Forward Capacity Auctions.**

An Interconnection Customer with a Long Lead Facility may, without loss of Queue Position, elect to participate in an earlier Forward Capacity Auction than originally anticipated, but only if the election to accelerate is made to the System Operator in writing within thirty (30) Calendar Days of the Scoping Meeting or within thirty (30) Calendar Days of the completion of the System Impact Study (but before the Long Lead Facility and the results of the associated System Impact Study are incorporated into the Base Cases). Otherwise, such an election shall be considered a Material Modification.

## **3.3 Valid Interconnection Request.**

### **3.3.1 Initiating an Interconnection Request.**

To initiate and establish a valid Interconnection Request, Interconnection Customer must submit all of the following to the System Operator in the manner specified in Appendix 1 Interconnection Request to this ETU IP: (i) an initial deposit of \$50,000, (ii) a completed application in the form of Appendix 1, (iii) all information and deposits required under Section 3.2, and (iv) demonstration of Site Control or a posting of an additional deposit of \$10,000 in lieu of Site Control for all Interconnection Request except those requesting CNI Interconnection Service, in which case Site Control is required. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for (i) a modification to the Interconnection Customer's existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property, or (ii) a modification to existing Pool Transmission Facility that is not owned by the Interconnection Customer. The portions of the deposit of \$50,000 that have not been applied as provided in this Section 3.3.1 shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry

Deadline, (iii) the Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in relative order with any other Interconnection Request also requesting to be re-queued pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit of \$50,000 (and any study-related deposits, if any have been submitted) shall be applied toward the re-queued Interconnection Request's initial deposit of \$50,000 and any remaining balance will be refunded, or (iv) if the Interconnection Customer executes an ETU IA. Otherwise, any unused balance of the deposit of \$50,000 shall be non-refundable and applied on a pro-rata basis to offset costs incurred by Interconnection Customers with lower Queue Positions that are subject to re-study, as determined by the System Operator in accordance with the provisions of this ETU IP, as a result of the withdrawal of an Interconnection Request with a higher Queue Position.

The deposit of \$50,000 shall be applied toward the costs incurred by the System Operator associated with the Interconnection Request and Long Lead Facility treatment, as well as, the costs of the Interconnection Feasibility Study and/or the Interconnection System Impact Study, including the cost of developing the study agreements and their attachments, and the cost of developing the ETU IA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit of \$50,000 also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS.

If, in the case of a request that is not for CNI Interconnection Service, the Interconnection Customer demonstrates Site Control within the cure period specified in Section 3.3.3 after submitting its Interconnection Request, the additional deposit of \$10,000 shall be refundable; otherwise, that deposit shall be applied as provided in Section 3.1, including, toward the costs of any Interconnection Studies pursuant to the Interconnection Request, the cost of developing the study agreement(s) and associated attachment(s), and the cost of developing the ETU IA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. The portions of the deposit of \$10,000 that have not been applied as provided in this Section 3.3.1 also shall be refundable if (i) the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within ten (10) Business Days of the Scoping Meeting, (ii) the Interconnection Customer that is eligible for inclusion in a CSIS withdraws the Interconnection Request, pursuant to Section 4.2.3.2.1, by the Cluster Entry Deadline, (iii) the

Interconnection Customer that is eligible for inclusion in a CSIS requests, by the Cluster Entry Deadline, to be re-assigned a Queue Position at the bottom of the queue, pursuant to Section 4.2.3.2.1, in which case the unused balance of the deposit shall be applied toward the re-queued Interconnection Request in lieu of Site Control for NR Interconnection Service, or (iv) if the Interconnection Customer executes an ETU IA.

The expected Trial Operation Date of the new Elective Transmission Upgrade, or the increase in capability of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility interconnected to the Administered Transmission System, or of the implementation of a Material Modification to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System shall not exceed seven (7) years from the date the Interconnection Request is received by the System Operator, unless the Interconnection Customer demonstrates that such time required to actively engineer, permit and construct the new Elective Transmission Upgrade or increase in capability of the existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility interconnected to the Administered Transmission System or implement the Material Modification to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System will take longer than the seven year period. Upon such demonstration, the Trial Operation Date may succeed the date the Interconnection Request is received by the System Operator by a period of greater than seven (7) years so long as the Interconnection Customer, System Operator, and Interconnecting Transmission Owner agree; such agreement shall not be unreasonably withheld.

Within sixty (60) days of submitting an Interconnection Request to the System Operator, the Interconnection Customer with a request for an External ETU, shall provide evidence that it has submitted a valid request with the other Control Area to which it seeks to interconnect. Notwithstanding any other provision in this ETU IP, if such evidence is not provided within a period not to exceed sixty (60) days, the Interconnection Request will immediately be deemed withdrawn.

### **3.3.2 Acknowledgment of Interconnection Request.**

System Operator shall acknowledge receipt of the Interconnection Request within five (5) Business Days of receipt of the request and attach a copy of the received Interconnection Request to the acknowledgement. With the System Operator's acknowledgement of a valid Interconnection Request, the System Operator shall provide to the Interconnection Customer an Interconnection Feasibility Study

Agreement in the form of Appendix 2 or an Interconnection System Impact Study Agreement in the form of Appendix 3.

### **3.3.3 Deficiencies in Interconnection Request.**

An Interconnection Request will not be considered to be a valid Interconnection Request until all items in Section 3.3.1 have been received by the System Operator. If an Interconnection Request fails to meet the requirements set forth in Section 3.3.1, the System Operator shall notify the Interconnection Customer within five (5) Business Days of receipt of the initial Interconnection Request of the reasons for such failure and that the Interconnection Request does not constitute a valid request. Interconnection Customer shall provide the System Operator the additional requested information needed to constitute a valid request within ten (10) Business Days after receipt of such notice. Failure by Interconnection Customer to comply with this Section 3.3.3 shall be treated in accordance with Section 3.6.

### **3.3.4 Scoping Meeting.**

Within ten (10) Business Days after receipt of a valid Interconnection Request, System Operator shall establish a date agreeable to Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, for a Scoping Meeting, and such date shall be no later than thirty (30) Calendar Days from receipt of the valid Interconnection Request, unless otherwise mutually agreed upon by the Parties.

The purpose of the Scoping Meeting shall be (i) to discuss the estimated timeline for completing all applicable Interconnection Studies, and alternative interconnection options, (ii) to exchange pertinent information including any transmission data that would reasonably be expected to impact such interconnection options, (iii) to analyze such information, (iv) to determine the potential feasible Points of Interconnection, and (v) to discuss any other information necessary to facilitate the administration of the Interconnection Procedures. If a PSCAD model is required, the Parties shall discuss this at the Scoping Meeting. If the Interconnection Customer provided the technical data called for in Appendix 1, Attachment A with the Interconnection Request, the Parties shall discuss the detailed project design at the Scoping Meeting.

The Parties will bring to the meeting such technical data, including, but not limited to: (i) general facility loadings, (ii) general instability issues, (iii) information regarding general short circuit issues, (iv) general

voltage issues, and (v) general reliability issues as may be reasonably required to accomplish the purpose of the meeting. The Parties will also bring to the meeting personnel and other resources as may be reasonably required to accomplish the purpose of the meeting in the time allocated for the meeting. On the basis of the meeting, Interconnection Customer shall designate its Point of Interconnection, pursuant to Section 6.1, and one or more available alternative Point(s) of Interconnection. The duration of the meeting shall be sufficient to accomplish its purpose.

Unless the Interconnection Request has been identified to be included in a CRPS or eligible for inclusion in a CSIS, within five (5) Business Days following the Scoping Meeting Interconnection Customer shall notify the System Operator, in writing, (i) whether it wants the Interconnection Feasibility Study to be completed as a separate and distinct study or as part of the Interconnection System Impact Study; (ii) if requesting the Interconnection Feasibility Study be completed as a separate and distinct study, which of the alternative study scopes is being selected pursuant to Section 6.2; and (iii) the Point(s) of Interconnection and any reasonable alternative Point(s) of Interconnection for inclusion in the attachment to the Interconnection Feasibility Study Agreement, or the Interconnection System Impact Study Agreement if the Interconnection Customer elects not to pursue the Interconnection Feasibility Study.

### **3.4 OASIS Posting.**

The System Operator will maintain on its OASIS a list of all Interconnection Requests in its Control Area. The list will identify, for each Interconnection Request: (i) the maximum net summer and winter megawatt electrical output; (ii) the location by county and state of the Point of Interconnection; (iii) the station or transmission line or lines where the interconnection will be made; (iv) the projected Trial Operation Date; (v) the status of the Interconnection Request, including Queue Position; (vi) the type of Interconnection Service being requested (i.e., CNI Interconnection Service or NI Interconnection Service); and (vii) the availability of any studies related to the Interconnection Request; (viii) the date of the Interconnection Request; (ix) the type of Elective Transmission Upgrade to be constructed (e.g., Internal ETU, External ETU, controllable, non-controllable); and (x) for Interconnection Requests that have not resulted in a completed interconnection, an explanation as to why it was not completed. Except in the case of an Affiliate, the list will not disclose the identity of the Interconnection Customer until the Interconnection Customer executes an ETU IA or requests that the System Operator and Interconnecting Transmission Owner jointly file an unexecuted ETU IA with the Commission. Before participating in a Scoping Meeting with an Interconnection Customer that is also an Affiliate, the Interconnecting Transmission Owner shall post on OASIS an advance notice of its intent to do so. The System Operator

shall post to its OASIS site any deviations from the study timelines set forth herein. Interconnection Study reports and Optional Interconnection Study reports shall be posted to the System Operator's OASIS site subsequent to the meeting between the System Operator, Interconnecting Transmission Owner, and Interconnection Customer to discuss the applicable study results. The System Operator shall also post any known deviations in the Elective Transmission Upgrade's Trial Operation Date.

### **3.5 Coordination with Affected Systems.**

The System Operator will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems with Affected Parties and, if possible, include those results (if available) in its applicable Interconnection Study within the time frame specified in this ETU IP. The System Operator will include such Affected Parties in all meetings held with the Interconnection Customer as required by this ETU IP. The Interconnection Customer will cooperate with the System Operator and Interconnecting Transmission Owner in all matters related to the conduct of studies and the determination of modifications to Affected Systems. The Interconnection Customer shall be responsible for the costs associated with the studies or portions of studies associated with the Affected Systems. Payment and refunds associated with the costs of such studies will be coordinated between the Interconnection Customer and the Affected Party(ies).

The System Operator shall seek the cooperation of all Affected Parties in all matters related to the conduct of studies and the determination of modifications to Affected Systems. Nothing in the foregoing is intended to authorize the Interconnection Customer to receive interconnection, related facilities or other services on an Affected System, and provision of such services must be handled through separate arrangements with Affected Party(ies).

### **3.6 Withdrawal.**

The Interconnection Customer may withdraw its Interconnection Request at any time by written notice of such withdrawal to System Operator, which System Operator will transmit to Interconnecting Transmission Owner and any Affected Parties. In addition, if the Interconnection Customer fails to adhere to all requirements of this ETU IP, except as provided in Section 13.5 (Disputes), the System Operator shall deem the Interconnection Request to be withdrawn and shall provide written notice to the Interconnection Customer of the deemed withdrawal and an explanation of the reasons for such deemed withdrawal. Except as otherwise provided elsewhere in this ETU IP, the Interconnection Customer shall have fifteen (15) Business Days in which to either respond with information or actions that cure the

deficiency or to notify the System Operator of its intent to pursue Dispute Resolution, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

Withdrawal shall result in the loss of the Interconnection Customer's Queue Position. If an Interconnection Customer disputes the withdrawal and loss of its Queue Position, then during Dispute Resolution, the System Operator may eliminate the Interconnection Customer's Interconnection Request from the queue until such time that the outcome of Dispute Resolution would restore its Queue Position. An Interconnection Customer that withdraws or is deemed to have withdrawn its Interconnection Request shall pay to System Operator, Interconnecting Transmission Owner, and any Affected Parties all costs prudently incurred with respect to that Interconnection Request prior to System Operator's receipt of notice described above. The Interconnection Customer must pay all monies due before it is allowed to obtain any Interconnection Study data or results.

The System Operator shall update the OASIS Queue Position posting. Except as otherwise provided elsewhere in this ETU IP, the System Operator and the Interconnecting Transmission Owner shall arrange to refund to the Interconnection Customer any portion of the Interconnection Customer's deposit or study payments that exceeds the costs incurred, including interest calculated in accordance with section 35.19a(a)(2) of the Commission's regulations, or arrange to charge to the Interconnection Customer any amount of such costs incurred that exceed the Interconnection Customer's deposit or study payments, including interest calculated in accordance with section 35.19a(a)(2) of the Commission's regulations. In the event of such withdrawal, System Operator, subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information, shall provide, at Interconnection Customer's request, all information developed for any completed study conducted up to the date of withdrawal of the Interconnection Request.

## **SECTION 4. QUEUE POSITION.**

### **4.1 General.**

System Operator shall assign a Queue Position based upon the date and time of receipt of the valid Interconnection Request; provided that, if the sole reason an Interconnection Request is not valid is the lack of required information on the application form in Appendix 1 to this ETU IP, and Interconnection Customer provides such information in accordance with Section 3.3.3, then System Operator shall assign



Interconnection Customer a Queue Position based on the date the application form was originally submitted.

Except as otherwise provided in this Section 4.1, the Queue Position of each Interconnection Request will be used to determine: (i) the order of performing the Interconnection Studies; (ii) the order in which Interconnection Requests will be eligible for inclusion in the CSIS and CFAC; (iii) the order in which Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service will be included in the CNR Group Study; and (iv) the cost responsibility for the facilities and upgrades necessary to accommodate the Interconnection Request. A higher queued Interconnection Request is one that has been placed “earlier” in the queue in relation to another Interconnection Request that is lower queued.

A CSIS and CFAC shall include the Interconnection Requests that were identified as eligible to participate in the CSIS and CFAC and met the associated requirements for inclusion in said studies in accordance with Section 4.2 of this ETU IP. An Interconnection Request included in a cluster shall consider a higher queued Interconnection Request not included in the cluster. A lower queued Interconnection Request that is not included in the cluster shall consider all of the higher queued Interconnection Requests that are part of the cluster.

#### **4.1.1 Order of Interconnection Requests in the CNR Group Study.**

Participation in a CNR Group Study shall be a prerequisite to achieve CNR Interconnection Service and CNI Interconnection Service. The CNR Group Study (to be conducted in accordance with Section III.13.1.1.2.3 of the Tariff) shall include all Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service that have an associated New Capacity Show of Interest Form that was submitted during the New Capacity Show of Interest Submission Window for the purpose of qualification for participation in the same Forward Capacity Auction for a Capacity Commitment Period, in accordance with Section III.13.1.1.2 of the Tariff, as well as Long Lead Facilities in accordance with Section 3.2.3. Where a CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a lower Queue Position is associated with a New Capacity Show of Interest Form that was submitted for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and another CNR Interconnection Service or CNI Interconnection Service Interconnection Request with a higher Queue Position is not associated with a New Capacity Show of Interest Form that was submitted for qualification until a subsequent Forward Capacity Auction, the CNR Interconnection Service or CNI

Interconnection Service Interconnection Request with the lower Queue Position will be included in the CNR Group Study prior to the CNR Interconnection Service or the CNI Interconnection Service Interconnection Request with the higher Queue Position.

However, where an Interconnection Customer with a CNR Interconnection Service Interconnection Request submits a New Capacity Show of Interest Form for qualification to participate in a particular Forward Capacity Auction for a Capacity Commitment Period and identifies in that New Capacity Show of Interest Form one or more Elective Transmission Upgrade Interconnection Request(s) for an Internal ETU that is not already included in the network model pursuant to Section III.12 of the Tariff for the particular Forward Capacity Auction, the CNR Interconnection Request will be included in the CNR Group Study at the lowest of the CNR Interconnection Request's or its associated Elective Transmission Upgrade Interconnection Request(s) for the Internal ETU's Queue Position. Where multiple Interconnection Customers' CNR Interconnection Service Interconnection Requests are associated with the same lower Queue Position for an Elective Transmission Upgrade Interconnection Request for an Internal ETU in the CNR Group Study, the CNR Interconnection Request's Queue Position will be used as the tie breaker to dictate the relative order in which the CNR Interconnection Service Interconnection Request will be included in the CNR Group Study.

An Interconnection Customer with a Generating Facility or that is associated with an Import Capacity Resource in the case of an Elective Transmission Upgrade that is treated as a Conditional Qualified New Resource, in accordance with Section III.13.1.1.2.3(f) of the Tariff, may be responsible for the facilities and upgrades associated with an overlapping CNR Interconnection Service or CNI Interconnection Service Interconnection Request having a higher Queue Position if the Conditional Qualified New Resource obtains a Capacity Supply Obligation through a Forward Capacity Auction under Section III.13.2.5 of the Tariff.

An Interconnection Customer with a lower queued CNR Interconnection Service Interconnection Request for a Generating Facility or CNI Interconnection Service Interconnection Request for an Elective Transmission Upgrade that has achieved Commercial Operation and obtained CNR Interconnection Service or CNI Interconnection Service, respectively, may be responsible for additional facilities and upgrades if the related higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively. In such circumstance, Appendix A

to the Interconnection Agreement for the lower queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request shall specify the facilities and upgrades for which the Interconnection Customer shall be responsible if the higher queued CNR Interconnection Service or CNI Interconnection Service Interconnection Request for a Long Lead Facility achieves Commercial Operation and obtains CNR Interconnection Service or CNI Interconnection Service, respectively.

Interconnection Requests for CNR Interconnection Service and CNI Interconnection Service submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff shall be included in the CNR Group Study in order of submission/approval (the dates of submission shall be used for Interconnection Requests submitted to the System Operator and the dates of Proposed Plan Application approval shall be used for interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates). Interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates that have not yet received the System Operator's approval for their Proposed Plan Applications under Section I.3.9 of the Tariff at the commencement of the CNR Group Study shall be included in the CNR Group Study after all Interconnection Requests submitted to the System Operator pursuant to Schedules 22, 23, or 25 of Section II of the Tariff and all interconnection requests submitted to Interconnecting Transmission Owners or their distribution company affiliates pursuant to the applicable state tariff, rules or procedures that have obtained Proposed Plan Application approval from the System Operator pursuant to Section I.3.9 of the Tariff have been included in the CNR Group Study in order of submission to the Interconnecting Transmission Owners or their distribution company affiliates.

## **4.2 Clustering.**

Clustering Interconnection Studies shall be conducted in such a manner to ensure the efficient implementation of the applicable Regional System Plan in light of the New England Transmission System's capabilities for the time period under study. The System Operator may study an Interconnection Request serially to the extent warranted by Good Utility Practice based upon the electrical remoteness of the proposed Elective Transmission Upgrade.

### **4.2.1 Triggers for Studying Interconnection Requests in Clusters.**

At the discretion of the System Operator, Interconnection Requests will be studied in clusters for the purpose of the Interconnection System Impact Study and the Interconnection Facilities Study when the combination of the following circumstances is present in the interconnection queue: (a) there are two (2) or more Interconnection Requests without completed Interconnection System Impact Studies in the same electrical part of the New England Control Area based on the requested Point of Interconnection, and (b) the System Operator determined that none of the Interconnection Requests identified in (a) of this Section 4.2.1 will be able to interconnect, either individually or on a cluster basis, without the use of common significant new transmission line infrastructure at or above 115 kV AC or HVDC. An Interconnection Request for an Internal ETU that the System Operator identifies as potentially eligible to take the place of a CETU will be eligible to participate in a CSIS.

#### **4.2.2 Notice of Initiation of Cluster Studies.**

When the combination of the triggers specified in Section 4.2.1 of this ETU IP are present in the interconnection queue, the System Operator will provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff. The System Operator also will provide notice to the Interconnection Customers with Interconnection Requests identified in Section 4.2.1 of this ETU IP, and at the time the System Operator notifies the Planning Advisory Committee of the initiation of a cluster, all study work for these Interconnection Requests will be suspended and they will proceed under Section 4.2 of this ETU IP. The System Operator will conduct Clustering in two phases. In the first phase, the System Operator will perform a CRPS to identify the CETU and associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests considered in Section 4.2.1 of this ETU IP, consistent with Section 15.2 of Attachment K. In the second phase, the System Operator will conduct a CSIS and a CFAC to study the Interconnection Requests identified through the CRPS that have elected to participate in the CSIS together with the identified CETU and associated upgrades, in accordance with this ETU IP.

Within sixty (60) Calendar Days of the System Operator's notice to the Planning Advisory Committee of the initiation of the use of Clustering for studying certain Interconnection Requests under the Regional System Planning Process in accordance with Section 15.1 of Attachment K, Section II of the Tariff, Interconnection Customers with Interconnection Requests identified in Section 4.2.1 shall submit the technical data called for in Appendix 1, Attachment A, to support the conduct of the CRPS.

#### **4.2.3 Cluster Interconnection System Impact Study.**

##### **4.2.3.1 Notice of Cluster Interconnection System Impact Study Entry Deadline.**

At the same time the System Operator issues the final CRPS report to the Planning Advisory Committee in accordance with Section 15.4 of Attachment K, the System Operator will provide notice of the entry deadline for the CSIS (the “Cluster Entry Deadline”) to the Interconnection Customers with Interconnection Requests identified in the final CRPS report as eligible to participate in the CSIS. The Cluster Entry Deadline shall be thirty (30) Calendar Days from the posting of the final CRPS report.

##### **4.2.3.2 Cluster Interconnection System Impact Study Entry Requirements.**

All Interconnection Requests identified in the final CRPS report, by Queue Position as assigned in accordance with Section 4.1 of this ETU IP, shall be eligible to be studied together in the CSIS.

**4.2.3.2.1 Cluster Entry Deadline Election.** By the Cluster Entry Deadline, an Interconnection Customer with an Interconnection Request identified as eligible to be studied in the CSIS must, in writing:

1. withdraw the Interconnection Request, pursuant to Section 3.6;
2. request that the System Operator re-assign the Interconnection Customer’s Interconnection Request a new Queue Position at the bottom of the queue as of the Cluster Entry Deadline in relative order with any other Interconnection Requests requesting to be re-queued under this Section 4.2.3.2.1; or
3. request to be included in the CSIS and meet the CSIS entry requirements specified in Section 4.2.3.2.2.

If, by the Cluster Entry Deadline, Interconnection Customer fails to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or request to be included in the CSIS and meet the CSIS entry requirements, then the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If Interconnection Customer elects option (iii) and does not meet all of the CSIS entry requirements specified in Section 4.2.3.2.2 by the Cluster Entry Deadline, the Interconnection Request will be automatically withdrawn from the interconnection queue as of the Cluster Entry Deadline without further opportunity to cure. If an initial Cluster Participation Deposit had been submitted as part of the incomplete CSIS entry requirements submission, the initial Cluster Participation Deposit will be refunded at the time the Interconnection Request is withdrawn.

#### **4.2.3.2.2 CSIS Entry Requirements**

An Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to be studied in the CSIS that elects option (iii) under Section 4.2.3.2.1 must meet the following CSIS entry requirements in order to be included in the CSIS:

**(1) Cluster System Impact Study Application.** By the Cluster Entry Deadline, Interconnection Customer must submit to the System Operator a completed Cluster System Impact Study Application in the form specified in Appendix 1, Attachment A-1, of this ETU IP requesting the inclusion of the Interconnection Request in the CSIS;

**(2) System Impact Study Agreement, Study Deposit, Technical Data, and Site Control.** If an Interconnection Feasibility Study Agreement or an Interconnection System Impact Study Agreement has been executed prior to the issuance of the final CRPS report identifying the Interconnection Request as eligible for inclusion in a CSIS, such agreement shall terminate upon execution of a new Interconnection System Impact Study Agreement in accordance with this Section 4.2.3.2.2, and any unused balance of the study deposit associated with the terminated agreement shall be applied toward the study deposit associated with the new Interconnection System Impact Study Agreement.

Within fifteen (15) Business Days following the Cluster Entry Deadline, the System Operator and Interconnecting Transmission Owner will provide to Interconnection Customer an Interconnection System Impact Study Agreement, including a non-binding good faith estimate of the costs and timeframe for commencing and completing the CSIS.

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after receipt along with continued demonstration of Site Control, the technical data called for in Appendix 1, Attachment A, and a refundable study deposit, to the extent that any additional study deposit is required, in accordance with Section 7.2 of this ETU IP.

**(3) Cluster Participation Deposit for the CSIS.** By the Cluster Entry Deadline, Interconnection Customer also must submit to the System Operator an initial Cluster Participation Deposit equal to: (a) for an External ETU, five (5) percent of the Interconnection Customer's cost allocation responsibility for

the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CRPS report, or (b) for an Internal ETU, the lesser of \$1,000,000 or five (5) percent of the Interconnection Customer's estimated costs for the Internal ETU as of the time the initial Cluster Participation Deposit is due. If the System Operator subsequently identifies that an Internal ETU has met the requirements to take the place of a CETU, or portion thereof, pursuant to Section 4.2.3.4 of this ETU IP, the initial Cluster Participation Deposit will be reduced to exclude the costs associated with the CETU, or portion thereof, that is being replaced by the Internal ETU, and the Interconnection Customer shall be refunded the corresponding amount. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The initial Cluster Participation Deposit will be fully refunded (with interest to be calculated in accordance with Section 3.6 of this ETU IP) to Interconnection Customer with an Interconnection Request that met the cluster entry requirements: (i) if the CSIS is initially undersubscribed by more than ten (10) percent of the quantity of megawatts that the CETU developed through the CRPS was designed to enable and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, before the CSIS starts, (ii) if the CSIS is initially oversubscribed as described in Section 4.2.3.3.2 of this ETU IP (e.g., the CETU developed through the CRPS is designed to enable 1,000 MW and more than 1,000 MW meet the CSIS entry requirements by the Cluster Entry Deadline), in which case the Cluster Participation Deposits will be refunded to Interconnection Customers with Interconnection Requests corresponding to the oversubscribed megawatt quantities, (iii) if the cost estimates for the CETU and the associated system upgrades provided in the final CRPS report for the entire cluster have increased by twenty-five (25) percent or more when compared to the cost estimates provided in the draft CSIS report or the draft CFAC report and the Interconnection Customer withdraws the Interconnection Request, pursuant to Section 3.6, within thirty (30) Calendar Days after receipt of the draft CSIS report or the draft CFAC report in accordance with Sections 7.5 and 8.3 of this ETU IP, respectively, (iv) if less than two (2) Interconnection Requests included in the CSIS or CFAC remain in the interconnection queue during the CSIS or CFAC, as applicable, in which case, the CSIS or the CFAC terminates and the remaining Interconnection Request proceeds in serial queue order, (v) at the time the Interconnection Customer with an Interconnection Request included in the CSIS provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this ETU IP, (vi) if no Interconnection Customer with an Interconnection Request included in the cluster executes an Interconnection Agreement and provides to the Interconnecting Transmission Owner the deposit specified in Section 11.3.1.2 of this ETU IP, or (vii) if all Interconnection Requests included in the cluster withdraw from the interconnection queue.

Otherwise, the initial Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue at any time after the Cluster Entry Deadline. The non-refundable initial Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

#### **4.2.3.3 Cluster Filling, Oversubscription and Backfilling Upon Withdrawal.**

**4.2.3.3.1 Cluster Filling.** The CSIS shall be filled with all Interconnection Requests in the same electrical part of the New England Control Area relative to the CETU identified in the final CRPS report that do not yet have a completed Interconnection System Impact Study and met the CSIS entry requirements by the Cluster Entry Deadline up to the approximate megawatt quantity identified in the final CRPS report as potentially enabled by the CETU. The Interconnection Requests will be included in the CSIS in queue order, based on the Queue Positions assigned in accordance with Section 4.1 of this ETU IP, relative to other eligible Interconnection Requests.

**4.2.3.3.2 Cluster Oversubscription.** If an Interconnection Customer with an Interconnection Request identified in the final CRPS report as eligible to participate in a CSIS met the CSIS entry requirements and therefore would have been eligible for inclusion in the CSIS but is excluded as a result of the quantity of megawatts identified as potentially enabled by the CETU in the final CRPS report having been exhausted in queue order under Section 4.2.3.3.1, (i) the initial Cluster Participation Deposit will be refunded to the Interconnection Customer, and (ii) the Interconnection Request will maintain its Queue Position. If there are two (2) or more Interconnection Request after the CSIS is filled, the System Operator will initiate another cluster to identify the transmission infrastructure to enable the interconnection of another round of Interconnection Requests consistent with Section 15.1 of Attachment K.

**4.2.3.3.3 Cluster Backfilling Upon Withdrawal.** Upon withdrawal of an Interconnection Request that is included in the CSIS, the System Operator will backfill the CSIS, in queue order, with later-queued Interconnection Requests consistent with the methodology used to fill the original CSIS as specified in Section 4.2.3.3.1 of this ETU IP. The System Operator will notify all Interconnection Customers with



Interconnection Requests identified by the System Operator as eligible for backfilling that the respective Elective Transmission Upgrade (or part thereof) proposed in the Interconnection Request is eligible to participate in the CSIS, and the Interconnection Customer shall have thirty (30) Calendar Days from receipt of System Operator's notice to withdraw its Interconnection Request, request to be re-assigned a Queue Position at the bottom of the queue, or accept the inclusion of the Interconnection Request (or part thereof, in which case the Interconnection Customer shall modify the Interconnection Request to reflect the appropriate reduction) in the CSIS and meet the CSIS entry requirements, consistent with Section 4.2.3.2 of this ETU IP. If the Interconnection Customer does not make one of these three elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure and consider other later-queued Interconnection Requests.

**4.2.3.4 Scope of Cluster Interconnection System Impact Study.** Except as otherwise provided in this Section 4.2.3.4, the CSIS shall be conducted in accordance with Sections 7.3 and 7.4 of this ETU IP. The Study Case developed for the CSIS shall also include the CETU and associated system upgrades identified in the final CRPS report. An Internal ETU can be considered, and included in the CSIS, in place of a CETU, or portion thereof, if all of the Interconnection Customers with Interconnection Requests included in the cluster that the ISO has determined need to use the Internal ETU have indicated in the Cluster Application Form or with the executed Interconnection System Impact Study Agreement that they have a contractual commitment in place providing for the Interconnection Customers to fund and the right to use the Internal ETU. The CSIS shall evaluate the proposed interconnections to the New England Transmission System under the NC Interconnection Standard consistent with Section 3.2.2 of this ETU IP and as detailed in the ISO New England Planning Procedures. Consistent with the NC Interconnection Standard, the evaluation will include conditions where the projects proposed in the Interconnection Requests that are included in the CSIS are not dispatched against each other if they do not share a system constraint that would provide the basis for a redispatch condition. The CSIS shall consist of the analysis specified in Section 7.3 of this ETU IP except for analysis associated with an Interconnection Feasibility Study or a preliminary, non-binding, analysis. An Interconnection Customer with an Interconnection Request being studied as part of the CSIS cannot elect to have the Interconnection Feasibility Study or a preliminary, non-binding, analysis performed as part of the CSIS.

**4.2.3.5. Restudy of Cluster Interconnection System Impact Study.** In addition to the circumstances specified in Section 7.6 of this ETU IP, a re-study of the CSIS is required due to the withdrawal of an

Interconnection Request that had been included in the CSIS. Upon withdrawal of an Interconnection Request that had been included in the CSIS, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study will be conducted to determine if there are any changes in the upgrades identified during the CSIS with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

#### **4.2.4. Cluster Interconnection Facilities Study.**

Notwithstanding any other provision in this ETU IP, an Interconnection Customer with an Interconnection Request included in a completed CSIS will not be eligible to waive the, or request a separate, CFAC. All Interconnection Customers with an Interconnection Request included in a completed CSIS shall be studied together in the CFAC for the purpose of implementing the conclusions of the CSIS with respect to non-sole use facilities.

**4.2.4.1 Cluster Interconnection Facilities Study Entry Requirements.** An Interconnection Customer with an Interconnection Request that was included in a completed CSIS shall execute an Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator, together with the required technical data and refundable deposit for the Interconnection Facilities Study as specified in Section 8.1 of this ETU IP.

**4.2.4.2. Scope of Interconnection Facilities Study.** The CFAC will be conducted in accordance with Sections 8.2 and 8.3 of this ETU IP based on a +/- 20 percent good faith cost estimate.

**4.2.4.3 Re-study of the Interconnection Facilities Study.** In addition to the circumstances specified in Section 8.5 of this ETU IP, a re-study of the CFAC is required due to the withdrawal of an Interconnection Request that had been included in the CFAC. Upon withdrawal of an Interconnection Request included in the CFAC, the System Operator will backfill the CSIS with eligible Interconnection Requests pursuant to Section 4.2.3.3.3. A re-study of the CSIS and CFAC will be conducted to determine if there are any changes in the upgrades identified during the CSIS and CFAC with the exception of the CETU identified in the final CRPS report, which shall remain configured consistent with the megawatt quantity(ies) considered in the final CRPS report.

**4.2.4.4 Additional Cluster Participation Deposit.** Within thirty (30) Calendar Days after receipt of the final CFAC report in accordance with Section 8.3 of this ETU IP, an Interconnection Customer with an Interconnection Request included in the CFAC shall submit to the System Operator an additional Cluster Participation Deposit equal to: (a) for an External ETU, five (5) percent of the Interconnection Customer's cost allocation responsibility for the CETU and associated system upgrades to be determined based on the cost estimates provided in the final CFAC report, or (b) for an Internal ETU, the lesser of \$1,000,000 or five (5) percent of the Interconnection Customer's estimated costs for the Internal ETU as of the time the additional Cluster Participation Deposit is due. Cost allocation of the CETU and associated system upgrades shall be in accordance with Schedule 11, Section II of this Tariff.

The additional Cluster Participation Deposit provided under this Section 4.2.4.4 will be fully refunded (with interest to be calculated in accordance with Section 3.6 of this ETU IP) to Interconnection Customer that submitted the additional Cluster Participation Deposit if the conditions specified in Sections 4.2.3.2.2(3)(v), (vi) or (vii) above occur.

Otherwise, the additional Cluster Participation Deposit shall be non-refundable if the Interconnection Customer withdraws its Interconnection Request or the Interconnection Request is withdrawn from the interconnection queue. The non-refundable additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in a cluster at the time the facilities proposed in the Interconnection Requests achieve Commercial Operation.

### **4.3 Transferability of Queue Position.**

An Interconnection Customer may transfer its Queue Position to another entity only if such entity acquires the specific Elective Transmission Upgrade identified in the Interconnection Request and the Point of Interconnection does not change. The Interconnection Customer must notify the System Operator, in writing, of any transfers of Queue Position and must provide the System Operator with the transferee's contact information, and System Operator shall notify Interconnecting Transmission Owner and any Affected Parties of the same.

### **4.4 Modifications.**

The Interconnection Customer shall submit to System Operator and Interconnecting Transmission Owner, in writing, modifications to any information provided in the Interconnection Request, including its

attachments. The Interconnection Customer shall retain its Queue Position if the modifications are in accordance with Sections 4.4.1 or 4.4.4, or are determined not to be Material Modifications pursuant to Section 4.4.2. The System Operator will notify the Interconnecting Transmission Owner, and, when System Operator deems it appropriate in accordance with applicable codes of conduct and confidentiality requirements, it will notify any Affected Party of such modifications.

A new Interconnection Request shall be required to: (1) increase the capability of an Elective Transmission Upgrade above that specified in an Interconnection Request, or an existing Interconnection Agreement (whether executed or filed in unexecuted form with the Commission); (2) change from NI Interconnection Service to CNI Interconnection Service, in which case a new Interconnection Request for CNI Interconnection Service shall be required; or (3) change the objective specified in an Interconnection Request. Such new Interconnection Request will receive the lowest Queue Position available at the time the Interconnection Request is submitted for purposes of cost allocation and study analysis.

Notwithstanding the foregoing, an Interconnection Customer with an Interconnection Request for CNI Interconnection Service has until the Forward Capacity Auction for which the associated Capacity Commitment Period begins less than seven (7) years (or the years agreed to pursuant to Section 3.3.1 or Section 4.4.5) from the date of the original Interconnection Request for CNI Interconnection Service for an Import Capacity Resource(s) associated with its Elective Transmission Upgrade to clear the entire megawatt amount for which CNI Interconnection Service was requested. A new Interconnection Request for CNI Interconnection Service will be required for the Elective Transmission Upgrade to enable the participation of an Import Capacity Resource in any subsequent auctions.

During the course of the Interconnection Studies, either the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, may identify changes to the planned interconnection that may improve the costs and benefits (including reliability) of the interconnection, and the ability of the proposed change to accommodate the Interconnection Request. To the extent the identified changes do not constitute a Material Modification and are acceptable to the Parties, such acceptance not to be unreasonably withheld, System Operator and the Interconnecting Transmission Owner shall modify the Point of Interconnection and/or configuration in accordance with such changes and proceed with any re-studies necessary to do so in accordance with Section 6.4, Section 7.6 and Section 8.5 as applicable and Interconnection Customer shall retain its Queue Position.

**4.4.1** Prior to the commencement of the Interconnection System Impact Study, modifications permitted under this Section shall include specifically: (a) a decrease of up to 60 percent in the capability of the proposed project; (b) modifying the technical parameters associated with the Elective Transmission Upgrade technology or characteristics; and (c) modifying the interconnection configuration.

Notwithstanding the foregoing, an Interconnection Customer may decrease the electrical output of a proposed Elective Transmission Upgrade after the Cluster Entry Deadline specified in Section 4.2.3.1 of this ETU IP; however, the requesting Interconnection Customer remains responsible for costs corresponding to the megawatt quantity requested as of the Cluster Entry Deadline.

**4.4.2** Prior to making any modification other than those specifically permitted by Sections 4.4.1 and 4.4.4, Interconnection Customer may first request that the System Operator and Interconnecting Transmission Owner evaluate whether such modification is a Material Modification. In response to Interconnection Customer's request, the System Operator in consultation with the Interconnecting Transmission Owner, and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall evaluate, at the Interconnection Customer's cost, the proposed modifications prior to making them and the System Operator will inform the Interconnection Customer in writing of whether the modifications would constitute a Material Modification. Any change to the Point of Interconnection, except those deemed acceptable under Sections 4.4.1, 6.1, 7.2 or so allowed elsewhere, shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed modification or proceed with a new Interconnection Request for such modification.

**4.4.3** Upon receipt of Interconnection Customer's request for modification that does not constitute a Material Modification and therefore is permitted under this Section 4.4, the System Operator in consultation with the Interconnecting Transmission Owner and in consultation with any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, shall commence and perform any necessary additional studies as soon as practicable, but in no event shall the System Operator, Interconnecting Transmission Owner, or Affected Party commence such studies later than thirty (30) Calendar Days after receiving notice of Interconnection Customer's request. Any additional studies resulting from such modification shall be done at Interconnection Customer's cost.

**4.4.4** Extensions of less than three (3) cumulative years in the Commercial Operation Date, In-Service Date or Trial Operation Date of the Elective Transmission Upgrade to which the Interconnection Request relates are not material and should be handled through construction sequencing, provided that the extension(s) do not exceed seven (7) years from the date the Interconnection Request was received by the System Operator.

**4.4.5** Extensions of three (3) or more cumulative years in the Commercial Operation Date, In-Service Date or Trial Operation Date of the Elective Transmission Upgrade to which the Interconnection Request relates or any extension of a duration that results in the Trial Operation Date exceeding the date the Interconnection Request was received by the System Operator by seven (7) or more years is a Material Modification unless the Interconnection Customer demonstrates to the System Operator due diligence in pursuit of permitting, licensing and construction of the Elective Transmission Upgrade to meet the Commercial Operation Date, In-Service Date or Trial Operation Date provided in the Interconnection Request. Such demonstration shall be based on evidence to be provided by the Interconnection Customer of accomplishments in permitting, licensing, and construction in an effort to meet the Commercial Operation Date, In-Service Date or Trial Operation Date provided in this Interconnection Request. Such evidence may include filed documents, records of public hearings, governmental agency findings, documentation of actual construction progress, including the previous four (4) months. If the evidence demonstrates that the Interconnection Customer did not undertake reasonable efforts to meet the Commercial Operation Date, In-Service Date or Trial Operation Date specified in the Interconnection Request, or demonstrates that reasonable efforts were not undertaken until four (4) months prior to the request for extension, the request for extension shall constitute a Material Modification. The Interconnection Customer may then withdraw the proposed Material Modification or proceed with a new Interconnection Request for such modification.

## **SECTION 5. PROCEDURES FOR TRANSITION.**

### **5.1 Rules for Establishing Queue Position for Interconnection Requests Pending Prior to February 16, 2015.**

**5.1.1** An Interconnection Customer with a request for Elective Transmission Upgrade submitted prior to February 16, 2015, shall be assigned a Queue Position pursuant to the following provisions.

**5.1.1.1** If the Interconnection Customer's Elective Transmission Upgrade has received an approval pursuant to Section I.3.9 of the Tariff prior to February 16, 2015:

**5.1.1.1.1** The Interconnection Request shall be assigned a Queue Position based on the date of the Elective Transmission Upgrade's approval pursuant to Section I.3.9 of the Tariff and shall be respected by all Interconnection Requests with a lower Queue Position than the Elective Transmission Upgrade's assigned Queue Position. The assigned Queue Position for an Interconnection Request of an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for NI Interconnection Service. Within sixty (60) days from February 16, 2015, the Interconnection Customer must: (a) proceed as directed in Section 8 of this ETU IP, and (b) submit a deposit of \$47,500 for the difference between the former Elective Transmission Upgrade application deposit (*i.e.*, \$ 2,500) and the new Elective Transmission Upgrade Interconnection Request deposit (*i.e.*, \$50,000) to be applied toward the costs of developing the ETU IA. Notwithstanding any other provision in this ETU IP, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request will be deemed withdrawn.

**5.1.1.1.2** The Interconnection Request shall be assigned a placeholder to establish a separate Queue Position for CNI Interconnection Service if the Interconnection Customer proposing an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility submits a valid Interconnection Request for CNI Interconnection Service within sixty (60) days from February 16, 2015. The Interconnection Customer's Interconnection Request for CNI Interconnection Service may also include a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. The placeholder for such Queue Position shall be at the bottom of the queue as of February 16, 2015, in relative order with any other Elective Transmission Upgrade Interconnection Request that falls under this Section 5.1.1.1.2. Notwithstanding any other provision in this ETU IP, if a valid Interconnection Request for CNI Interconnection Service is not submitted within a period not to exceed sixty (60) days from February 16, 2015, the placeholder Queue Position shall be deemed withdrawn.

**5.1.1.2** If the Interconnection Customer's Elective Transmission Upgrade has not received an approval pursuant to Section I.3.9 of the Tariff prior to February 16, 2015:

**5.1.1.2.1** An Interconnection Request with a System Impact Study Agreement that has been executed prior to February 16, 2015, and has been recognized by the System Operator as actively under study, shall be assigned a Queue Position at the bottom of the queue as of February 16, 2015, below the Queue Position of the Elective Transmission Upgrade Interconnection Requests that fall under Section 5.1.1.1.2 and in relative order based on the date of the former Elective Transmission Upgrade application submitted pursuant to Section II.47.5 of the Tariff, with any other Elective Transmission Upgrade Interconnection Request that falls under this Section 5.1.1.2.1. The assigned Queue Position of an Interconnection Request for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for CNI Interconnection Service unless the Interconnection Customer indicates in its updated Interconnection Request that it only seeks NI Interconnection Service. The System Impact Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the ETU IP in effect on February 16, 2015 (or as revised thereafter), including potential re-study to accommodate the revised queue. Within sixty (60) days from February 16, 2015, the Interconnection Customer shall submit: (a) an updated Interconnection Request for the same Elective Transmission Upgrade proposed in the former Elective Transmission Upgrade application submitted under Section II.47.5 of the Tariff together with all data requested to facilitate the System Operator, in coordination with Interconnecting Transmission Owner and Affected Party as deemed appropriate by the System Operator, completion of the System Impact Study, and (b) a deposit of \$250,000 minus any amounts already paid to the System Operator for estimated costs of the System Operator and the Interconnecting Transmission Owner to be applied toward the costs of the remaining study work and development of the ETU IA. At that time, Interconnection Customers with an Interconnection Request for CNI Interconnection Service may also include in its updated Interconnection Request a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. Notwithstanding any other provision in this ETU IP, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request shall be deemed withdrawn.

**5.1.1.2.2** An Interconnection Customer with a System Impact Study Agreement that has been executed prior to February 16, 2015, but is not recognized by the System Operator as actively under study, shall be assigned a Queue Position at the bottom of the queue as of February 16, 2015, below the Queue Position of the Elective Transmission Upgrade Interconnection Requests that fall under Section 5.1.1.2.1 and in relative order with any other Elective Transmission Upgrade Interconnection Request that falls under this



Section 5.1.1.2.2. The assigned Queue Position of an Interconnection Request for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for CNI Interconnection Service unless the Interconnection Customer indicates in its updated Interconnection Request that it only seeks NI Interconnection Service. The System Impact Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the ETU IP in effective on February 16, 2015 (or as revised thereafter), including potential re-study to accommodate the revised queue. Within sixty (60) days from February 16, 2015, the Interconnection Customer shall submit: (a) an updated Interconnection Request for the same Elective Transmission Upgrade proposed in the former Elective Transmission Upgrade application submitted under Section II.47.5 of the Tariff together with all data requested to facilitate the System Operator, in coordination with Interconnecting Transmission Owner and Affected Party as deemed appropriate by the System Operator, conduct of the System Impact Study, and (b) \$250,000 to be applied toward the costs of the System Impact Study and development of the ETU IA. At that time, Interconnection Customers with an Interconnection Request for CNI Interconnection Service may also include in its updated Interconnection Request a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. Notwithstanding any other provision in this ETU IA, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request shall be deemed withdrawn.

**5.1.1.2.3** An Interconnection Customer that does not have an executed System Impact Study Agreement prior to February 16, 2015, shall be assigned a Queue Position at the bottom of the queue as of February 16, 2015, below the Queue Position of the Elective Transmission Upgrade Interconnection Requests that fall under Section 5.1.1.2.2 and in relative order with any other Elective Transmission Upgrade Interconnection Request that falls under this Section 5.1.1.2.3. The assigned Queue Position of an Interconnection Request for an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility shall be for CNI Interconnection Service unless the Interconnection Customer provides written notification to the System Operator that it seeks only NI Interconnection Service. Within sixty (60) days from February 16, 2015, the Interconnection Customer shall: (a) submit an updated Interconnection Request for the same Elective Transmission Upgrade proposed in the former Elective Transmission Upgrade application submitted under Section II.47.5 of the Tariff together with all data requested to facilitate the System Operator, in coordination with Interconnecting Transmission Owner and Affected Party as deemed appropriate by the System Operator, conduct of the Interconnection

Studies, (b) submit a deposit of \$47,500 for the difference between the former Elective Transmission Upgrade application deposit (*i.e.*, \$ 2,500) and the new Elective Transmission Upgrade Interconnection Request deposit (*i.e.*, \$50,000) to be applied toward the costs of the Interconnection Studies and development of the ETU IA, and (c) proceed as directed in Section 6 of this ETU IP. At that time, Interconnection Customers with an Interconnection Request for CNI Interconnection Service may also include a request for Long Lead Facility Treatment, which shall be subject to review pursuant to Section 3.2.3, and, if applicable, a request for a change of the Commercial Operation Date, in accordance with Sections 4.4.4 and 4.4.5. Interconnection Studies shall be processed in accordance with the version of the ETU IP in effective on February 16, 2015 (or as revised thereafter). Notwithstanding any other provision in this ETU IP, if the Interconnection Customer fails to meet these requirements within a period not to exceed sixty (60) days, the Interconnection Request shall be deemed withdrawn.

## **5.2 Transition Rules for Pending Interconnection Requests After February 16, 2015.**

**5.2.1** Any Interconnection Customer assigned a Queue Position prior to November, 1 2017, shall retain that Queue Position subject to Section 4.4 of this ETU IP.

**5.2.1.1** If an Interconnection Study Agreement has not been executed prior to November 1, 2017, then such Interconnection Study, and any subsequent Interconnection Studies, shall be processed in accordance with the version of this ETU IP in effect on November 1, 2017 (or as revised thereafter).

**5.2.1.2** If an Interconnection Study Agreement has been executed prior to November 1, 2017 and is actively under study, such Interconnection Study shall be completed in accordance with the terms of such agreement. If an Interconnection Study Agreement has been executed prior to November 1, 2017, but the Interconnection Study has not commenced, such Interconnection Study shall be completed, and any subsequent Interconnection Studies shall be processed, in accordance with the version of the ETU IP in effect on November 1, 2017. Interconnection Studies for Interconnection Requests seeking to interconnect into the Northern and Western Maine parts of the New England Control Area that do not have a completed Interconnection System Impact Study by November 1, 2017 shall be included in the Maine Resource Integration Study, which shall be the first CRPS. The Interconnection Customers identified in the Maine Resource Integration Study as eligible to participate in the associated Cluster System Impact Study shall make one of the elections and complete the associated requirements specified in Section 4.2.3.2 of this ETU IP within thirty (30) Calendar Days from the later of November 1, 2017 or

the issuance of the final Maine Resource Integration Study report. If the Interconnection Customer does not make one of the elections and complete the associated requirements by the thirtieth Calendar Day, the System Operator shall automatically withdraw the Interconnection Request from the interconnection queue without further opportunity to cure.

**5.2.2 Transition Period.** To the extent necessary, the System Operator, Interconnection Customers with an outstanding Interconnection Request (i.e., an Interconnection Request for which an ETU IA has neither been executed nor submitted to the Commission for approval prior to November 1, 2017), Interconnecting Transmission Owner and any other Affected Parties, shall transition to proceeding under the version of the ETU IP in effect as of November 1, 2017 (or as revised thereafter) within a reasonable period of time not to exceed sixty (60) Calendar Days. The use of the term “outstanding Interconnection Request” herein shall mean any Interconnection Request, on November 1, 2017: (i) that has been submitted, together with the required deposit and attachments, but not yet accepted by the System Operator; (ii) where the related ETU IA has not yet been submitted to the Commission for approval in executed or unexecuted form, (iii) where the relevant Interconnection Study Agreements have not yet been executed, or (iv) where any of the relevant Interconnection Studies are in process but not yet completed. Any Interconnection Customer with an outstanding Interconnection Request as of the effective date of this ETU IP may request a reasonable extension of the next applicable deadline if necessary to avoid undue hardship or prejudice to its Interconnection Request. A reasonable extension, not to exceed sixty (60) Calendar Days, shall be granted by the System Operator to the extent consistent with the intent and process provided for under this ETU IP.

### **5.3 New System Operator or Interconnecting Transmission Owner.**

If the System Operator transfers operational control of the New England Transmission System to a successor System Operator during the period when an Interconnection Request is pending, the System Operator shall transfer to the successor System Operator any amount of the deposit or payment with interest thereon that exceeds the cost that it incurred to evaluate the request for interconnection. Any difference between such net amount and the deposit or payment required by this ETU IP shall be paid by or refunded to the Interconnection Customer, as appropriate. The System Operator shall coordinate with the successor System Operator to complete any Interconnection Study, as appropriate, that the System Operator has begun but has not completed.

If the Interconnecting Transmission Owner transfers ownership of its transmission facilities to a successor transmission owner during the period when an Interconnection Request is pending, and System Operator in conjunction with Interconnecting Transmission Owner has tendered a draft ETU IA to the Interconnection Customer but the Interconnection Customer has not either executed the ETU IA or requested the filing of an unexecuted ETU IA with the Commission, unless otherwise provided, the Interconnection Customer must complete negotiations with the successor transmission owner.

## **SECTION 6. INTERCONNECTION FEASIBILITY STUDY.**

### **6.1 Interconnection Feasibility Study Agreement.**

Except as otherwise provided in Section 4.2.3.4 of this ETU IP, the Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study under this Section 6, or as part of the Interconnection System Impact Study under Section 7. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and the System Operator shall be responsible for generating only one final report, which will include the results of both Section 6 and Section 7.

Within five (5) Business Days following the System Operator's and Interconnecting Transmission Owner's receipt from the Interconnection Customer of its designation of the Point(s) of Interconnection and of the type of study to be performed pursuant to Section 3.3.4, System Operator shall tender to Interconnection Customer the Interconnection Feasibility Study Agreement, which includes a good faith estimate of the cost for completing the Interconnection Feasibility Study. The Interconnection Feasibility Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). No later than thirty (30) Calendar Days after its receipt of the Interconnection Feasibility Study Agreement, (a) the Interconnection Customer shall execute and deliver the agreement to System Operator and the Interconnecting Transmission Owner, (b) the Interconnection Customer shall also deliver the refundable deposit for the Interconnection Feasibility Study to the System Operator, and (c) the technical data called for in Appendix 1, Attachment B. The deposit for the study shall be 100 percent

of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study, including the cost of developing the study agreement and its attachment(s). For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection Feasibility Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Interconnection Feasibility Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner on the Interconnection Feasibility Study, including the development of the study agreement and its attachment(s). The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold any amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection Feasibility Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the technical data called for in Appendix 1, Attachment A or B, depending on the scope elected pursuant to Section 3.3.1. If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection Feasibility Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection Feasibility Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection Feasibility Study Agreement or deposit.

If the Interconnection Feasibility Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to the Parties, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall

be completed pursuant to Section 6.4 as applicable. For the purpose of this Section 6.1, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement, as specified pursuant to Section 3.3.4, shall be the substitute.

## **6.2 Scope of Interconnection Feasibility Study.**

The Interconnection Feasibility Study shall preliminarily evaluate the feasibility of the proposed interconnection to the Administered Transmission System with available data and information. The Interconnection Feasibility Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii), any identified Network Upgrades) that, on the date the Interconnection Feasibility Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection Feasibility Study). An Interconnection Customer with a CNI Interconnection Service Interconnection Request may also request that the Interconnection Feasibility Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection Feasibility Study Agreement. The Interconnection Feasibility Study will consist of a power flow, including thermal analysis and voltage analysis, and short circuit analysis. The Interconnection Feasibility Study report will provide (i) a list of facilities, and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct the Interconnection Facilities and Network Upgrades; (iii) a protection assessment to determine the required Interconnection Facilities; and may provide (iv) an evaluation of the siting of Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environmental work for Interconnection Facilities and Network Upgrades.

Alternatively, in the case where the Interconnection Customer requests that the Interconnection Feasibility Study be completed as a separate and distinct study, the Interconnection Customer may

provide the technical data called for in Appendix 1, Attachment A with the executed Interconnection Feasibility Study Agreement and request that the Interconnection Feasibility Study consist of limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade's interconnection given recent study experience and as discussed at the Scoping Meeting. In this case, the Interconnection Feasibility Study report will provide (i) the study findings; and, (ii) a preliminary description of a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Elective Transmission Upgrade as identified within the scope of the analysis performed as part of the study. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 6.2, the Interconnection Feasibility Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

### **6.3 Interconnection Feasibility Study Procedures.**

The System Operator in coordination with Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection Feasibility Study no later than forty-five (45) Calendar Days after System Operator and Interconnecting Transmission Owner receive the fully executed Interconnection Feasibility Study Agreement, study deposit and required technical data in accordance with Section 6.1. At the request of the Interconnection Customer or at any time the System Operator or the Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Feasibility Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection Feasibility Study. If the System Operator is unable to complete the Interconnection Feasibility Study within that time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator with input from the Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow and short circuit databases that have been developed for the Interconnection Feasibility Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the

confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

### **6.3.1 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection Feasibility Study report to the Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Feasibility Study.

### **6.4 Re-Study.**

If re-study of the Interconnection Feasibility Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-designation of the Point of Interconnection pursuant to Section 6.1, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Feasibility Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Feasibility Study Agreement.

The Interconnection Customer shall have the option to waive the re-study and elect to have the re-study performed as part of its Interconnection System Impact Study. The Interconnection Customer shall provide written notice of the waiver and election of moving directly to the Interconnection System Impact Study within five (5) Business Days of receiving notice from the System Operator of the required re-study.



## **SECTION 7. INTERCONNECTION SYSTEM IMPACT STUDY.**

### **7.1 Interconnection System Impact Study Agreement.**

If the Interconnection Customer did not request that the Interconnection Feasibility Study be completed as a separate and distinct study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and the System Operator shall be responsible for generating only one final report, which will include the results of both Section 6 and Section 7.

Within five (5) Business Days following the Interconnection Feasibility Study results meeting, or subsequent to the Scoping Meeting within five (5) Business Days following the receipt of designation of the Point(s) of Interconnection and type of study to be performed pursuant to Section 3.3.4, if the Interconnection Customer did not request that the Interconnection Feasibility Study be completed as a separate and distinct study, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer the Interconnection System Impact Study Agreement, which includes a non-binding good faith estimate of the cost and timeframe for commencing and completing the Interconnection System Impact Study. The Interconnection System Impact Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the ETU IA.

### **7.2 Execution of Interconnection System Impact Study Agreement.**

The Interconnection Customer shall execute the Interconnection System Impact Study Agreement and deliver the executed Interconnection System Impact Study Agreement to the System Operator no later than thirty (30) Calendar Days after its receipt along with a demonstration of Site Control and the technical data called for in Appendix 1, Attachment A, and the Interconnection Customer shall also deliver a refundable deposit. An Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for (i) a modification to the Interconnection Customer's existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the

modification proposed in the Interconnection Request does not require additional real property, or (ii) a modification of an existing Pool Transmission Facility that is not owned by the Interconnection Customer. If a PSCAD model was determined to be needed for the Elective Transmission Upgrade at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model. The deposit for the study shall be the greater of 100 percent of the estimated cost of the study or \$250,000.

The deposit shall be applied toward the cost of the Interconnection System Impact Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the ETU IA. For Interconnection Requests that are identified for inclusion in a CRPS performed under Section 15 of Attachment K, Section II of the Tariff, the deposit also shall be applied toward the costs incurred by the Interconnecting Transmission Owner in developing the cost estimates in support of the CRPS. Any difference between the study deposit and the actual cost of the Interconnection System Impact Study or the actual costs incurred by the Interconnecting Transmission Owner in developing the costs estimates in support of the CRPS shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of Interconnection System Impact Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the System Impact Study, including the study agreement and its attachment(s) and the ETU IA. In the case of Clustering, CSIS costs that are associated with an individual Interconnection Request assessed within the CSIS will be charged directly to that Interconnection Customer. CSIS costs that are associated with the CSIS as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. If the Interconnection Customer elects the deposit described in (ii) above, the System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study on each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

On or before the return of the executed Interconnection System Impact Study Agreement to the System Operator and Interconnecting Transmission Owner, the Interconnection Customer shall provide the

technical data called for in Appendix 1, Attachment A; provided that if a PSCAD model was determined to be needed at the Scoping Meeting, then the Interconnection Customer shall have ninety (90) Calendar Days from the execution of the System Impact Study Agreement to provide the PSCAD model.

If the Interconnection Customer does not provide all such technical data when it delivers the Interconnection System Impact Study Agreement, the System Operator shall notify the Interconnection Customer of the deficiency within five (5) Business Days of the receipt of the executed Interconnection System Impact Study Agreement and the Interconnection Customer shall cure the deficiency within ten (10) Business Days of receipt of the notice, provided, however, such deficiency does not include failure to deliver the executed Interconnection System Impact Study Agreement or deposit.

If the Interconnection System Impact Study uncovers any unexpected result(s) not contemplated during the Scoping Meeting or the Interconnection Feasibility Study, a substitute Point of Interconnection identified by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and acceptable to each Party, such acceptance not to be unreasonably withheld, will be substituted for the designated Point of Interconnection specified above without loss of Queue Position, and re-studies shall be completed pursuant to Section 7.6 as applicable. For the purpose of this Section 7.2, if the Parties cannot agree on the substituted Point of Interconnection, then Interconnection Customer may direct that one of the alternatives as specified in the Interconnection Feasibility Study Agreement or Interconnection System Impact Study depending on whether Interconnection Customer requested that the Interconnection Feasibility Study be completed as a separate and distinct study or as part of the Interconnection System Impact Study, as specified pursuant to Section 3.3.4, shall be the substitute.

### **7.3 Scope of Interconnection System Impact Study.**

The Interconnection System Impact Study shall evaluate the impact of the proposed interconnection on the reliability and operation of the New England Transmission System. The Interconnection System Impact Study will consider the Base Case as well as all generating facilities and Elective Transmission Upgrades (and with respect to (iii) below, any identified Network Upgrades associated with such higher queued interconnection) that, on the date the Interconnection System Impact Study is commenced: (i) are directly interconnected to the New England Transmission System; (ii) are interconnected to Affected Systems and may have an impact on the Interconnection Request; (iii) have a pending higher queued

Interconnection Request to interconnect to the New England Transmission System and may have an impact on the Interconnection Request; and (iv) have no Queue Position but have executed an Interconnection Agreement or requested that an unexecuted Interconnection Agreement be filed with the Commission (the “Study Case” for the Interconnection System Impact Study). An Interconnection Customer with a CNI Interconnection Service Interconnection Request may also request that the Interconnection System Impact Study include a preliminary, non-binding, analysis to identify potential upgrades that may be necessary for the Interconnection Customer’s Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff, based on a limited set of assumptions to be specified by the Interconnection Customer and reflected in Attachment A to the Interconnection System Impact Study Agreement.

The Interconnection System Impact Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis and any other analyses, such as electromagnetic transient analysis, that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner. The Interconnection System Impact Study report will state the assumptions upon which it is based, state the results of the analyses, and provide the requirements or potential impediments to providing the requested interconnection service, including a preliminary indication of the cost and length of time that would be necessary to correct any problems identified in those analyses and implement the interconnection. The Interconnection System Impact Study report will provide (i) a list of facilities that are required as a result of the Interconnection Request and a non-binding good faith estimate of cost responsibility; (ii) a non-binding good faith estimated time to construct; (iii) a protection assessment to determine the required protection upgrades; and may provide (iv) an evaluation of the siting of the Interconnection Facilities and Network Upgrades; and (v) identification of the likely permitting and siting process including easements and environment work. To the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.3, the Interconnection System Impact Study report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer’s Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

#### **7.4 Interconnection System Impact Study Procedures.**

The System Operator shall coordinate the Interconnection System Impact Study with the Interconnecting Transmission Owner, and with any Affected Party as deemed appropriate by the System Operator in

accordance with applicable codes of conduct and confidentiality requirements, that is affected by the Interconnection Request pursuant to Section 3.5 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable when it performs the study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Interconnection System Impact Study within ninety (90) Calendar Days after the receipt of the Interconnection System Impact Study Agreement, study deposit, demonstration of Site Control, if Site Control is required, and required technical data in accordance with Section 7.2. If System Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection System Impact Study within the times specified in this Section 7.4.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection System Impact Study, the System Operator shall notify the Interconnection Customer as to the schedule status of the Interconnection System Impact Study. If the System Operator and Interconnecting Transmission Owner are unable to complete the Interconnection System Impact Study within the time period, the System Operator shall notify the Interconnection Customer and provide an estimated start date if the study has not commenced and completion date with an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide all supporting documentation, workpapers and relevant Study Case power flow, short circuit and stability databases that have been developed for the Interconnection System Impact Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

Except in the case of a CSIS, the System Operator shall notify the Interconnection Customer when the Interconnection System Impact Study is expected to commence within sixty-five (65) Calendar Days. An Interconnection Customer with an Interconnection Request being studied serially will be permitted to update the technical data provided in Appendix 1 and Attachment A, and submit modifications to that technical data to the System Operator no later than sixty (60) Calendar Days from the date that the System Operator notified the Interconnection Customer that the Interconnection System Impact Study is expected

to commence. Such modifications will not be deemed Material Modifications provided they meet the requirements of Section 4.4.1 of this ETU IP.

Where sufficient time has elapsed since the initial Scoping Meeting, within ten (10) Business Days after notifying the Interconnection Customer that the Interconnection System Impact Study is expected to commence, the System Operator may convene a second Scoping Meeting for the purpose of providing updated information to the Interconnection Customer in preparation for the submittal of updates to the technical data.

### **7.5 Meeting with Parties.**

Within ten (10) Business Days of providing an Interconnection System Impact Study report to Interconnection Customer, the System Operator shall convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, to discuss the results of the Interconnection System Impact Study.

Within ten (10) Business Days following the study results meeting, the Interconnection Customer shall provide to the System Operator written notice that it will either pursue the Interconnection Facilities Study or waive the Interconnection Facilities Study and elect an expedited interconnection. Once the Interconnection Customer notifies the System Operator of its election, such election is not subject to change. If the Interconnection Customer elects to pursue the Facilities Study it must proceed with the study. If the Interconnection Customer waives the Facilities Study, it shall commit to the following milestones in the ETU IA: (i) Siting process and approval schedule for the Elective Transmission Upgrade and Interconnection Facilities; (ii) Engineering of Interconnection Facilities and Elective Transmission upgrade approved by Interconnecting Transmission Owner; (iii) Ordering of long lead time material for Interconnection Facilities and system upgrades; (iv) Trial Operation Date; and (v) Commercial Operation Date.

Within thirty (30) Calendar Days of the Interconnection Customer receiving the Interconnection System Impact Study report, the Interconnection Customer shall provide written comments on the report or written notice that it has no comments on the report. The System Operator shall issue a final Interconnection System Impact Study report within fifteen (15) Business Days of receiving the

Interconnection Customer's comments or promptly upon receiving the Interconnection Customer's notice that it will not provide comments.

#### **7.6 Re-Study.**

If re-study of the Interconnection System Impact Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) re-designation of the Point of Interconnection pursuant to Section 7.2, (iv) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (v) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing.

Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study shall be borne by the Interconnection Customer being re-studied. If the original Interconnection System Impact Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection System Impact Study Agreement.

#### **7.7 Operational Readiness.**

The System Operator shall, as close to the Interconnection Customer's actual Trial Operation Date as reasonably possible, ensure that operational analysis, including current stability analyses, power flow analyses, and any other analyses deemed necessary by the System Operator, are performed, and that procedures are developed or updated to address the operation of the New England Transmission System with the addition of the Interconnection Customer's Elective Transmission Upgrade. The operational analysis will also include tests of system performance with selected facilities out of service. Such studies shall be performed at the expense of the Interconnection Customer.

The System Operator is not obligated to perform the operational analyses described in this Section 7.7 if, in the exercise of reasonable discretion, the System Operator in consultation with Interconnecting Transmission Owner determines that interconnection of the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System is remote and speculative.

## **SECTION 8. INTERCONNECTION FACILITIES STUDY.**

### **8.1 Interconnection Facilities Study Agreement.**

Except as otherwise provided in Section 4.2.4 of this ETU IP, the Interconnection Customer may waive the Interconnection Facilities Study and instead elect expedited interconnection, which means that the Interconnection Customer may enter into E&P Agreements under Section 9 if it had not already done so, and shall enter into an ETU IA in accordance with the requirements specified in Section 11.

If the Interconnection Customer waives the Interconnection Facilities Study, the Interconnection Customer, subject to the specific terms of the E&P Agreements, assumes all risks and shall pay all costs associated with equipment, engineering, procurement and construction work covered by the Interconnection Facilities Study as described in Section 8.2 below.

The System Operator shall provide to the Interconnection Customer an Interconnection Facilities Study Agreement in the form of Appendix 4 to this ETU IP simultaneously with the delivery of the Interconnection System Impact Study to the Interconnection Customer.

The Interconnection Facilities Study Agreement shall provide that the Interconnection Customer shall compensate the System Operator and Interconnecting Transmission Owner for the actual cost of the Interconnection Facilities Study, including the cost of developing the study agreement and its attachment(s) and the cost of developing the ETU IA. Within three (3) Business Days following the Interconnection System Impact Study results meeting, the System Operator and Interconnecting Transmission Owner shall provide to Interconnection Customer a non-binding good faith estimate of the cost for completing the Interconnection Facilities Study in accordance with requirements specified in Section 8.3. The Interconnection Customer shall execute the Interconnection Facilities Study Agreement and deliver the executed Interconnection Facilities Study Agreement to the System Operator within thirty (30) Calendar Days after its receipt, together with the required technical data and the refundable deposit for the Interconnection Facilities Study. In accordance with Section 8.3, the Interconnection Customer shall specify in Attachment A to the Interconnection Facilities Study Agreement whether it wants no more than a +/- 20 percent or a +/- 10 percent good faith cost estimate contained in the report. The deposit for the study shall be the greater of twenty-five percent of the estimated cost of the study or \$250,000.



Any difference between the study deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the cost of the Interconnection Facilities Studies that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Interconnection Facilities Study, the study agreement and its attachment(s) and the ETU IA. In the case of Clustering, CFAC costs that are associated with an individual Interconnection Request assessed within the CFAC will be charged directly to that Interconnection Customer. CFAC costs that are associated with the CFAC as a whole will be divided equally, on a per-project basis, among the Interconnection Customers in the cluster. The System Operator and the Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposit until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

## **8.2 Scope of Interconnection Facilities Study.**

The Interconnection Facilities Study shall specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Interconnection Facility to the Administered Transmission System. The Interconnection Facilities Study shall also identify the electrical switching configuration of the connection equipment, including, without limitation: the transformer, switchgear, meters, and other station equipment; the nature and estimated cost of any Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades necessary to accomplish the interconnection; and an estimate of the time required to complete the construction and installation of such facilities. The scope and cost of the Interconnection Facilities Study shall include completion of any engineering work limited to what is reasonably required to (i) estimate such aforementioned cost to the accuracy specified by the Interconnection Customer pursuant to Section 8.3, (ii) identify, configurations of required facilities and (iii) identify time requirements for construction and installation of required facilities.

## **8.3 Interconnection Facilities Study Procedures.**

The System Operator shall coordinate the Interconnection Facilities Study with Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, pursuant to Section 3.5 above. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in performing the Interconnection Facilities Study. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the study and the System Operator shall issue a draft Interconnection Facilities Study report to the Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, within the following number of days after receipt of an executed Interconnection Facilities Study Agreement: ninety (90) Calendar Days, with no more than a +/- 20 percent good faith cost estimate contained in the report; or one hundred eighty (180) Calendar Days, if the Interconnection Customer requests a +/- 10 percent good faith cost estimate. Such cost estimates either individually or in the aggregate will be provided in the final study report. If the System Operator uses Clustering, the System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to deliver a completed Interconnection Facilities Study within the times specified in this Section 8.3.

At the request of the Interconnection Customer or at any time the System Operator or Interconnecting Transmission Owner determines that it will not meet the required time frame for completing the Interconnection Facilities Study, System Operator shall notify the Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, as to the schedule status of the Interconnection Facilities Study. If the System Operator is unable to complete the Interconnection Facilities Study and issue a draft Interconnection Facilities Study report within the time required, the System Operator shall notify the Interconnection Customer, Interconnecting Transmission Owner and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, and provide an estimated completion date and an explanation of the reasons why additional time is required.

The Interconnection Customer and appropriate Affected Parties may, within thirty (30) Calendar Days after receipt of the draft report, provide written comments to the System Operator and Interconnecting Transmission Owner, which the System Operator shall include in the final report. The System Operator shall issue the final Interconnection Facilities Study report within fifteen (15) Business Days of receiving

the Interconnection Customer's comments or promptly upon receiving Interconnection Customer's statement that it will not provide comments. The System Operator may reasonably extend such fifteen-day period upon notice to the Interconnection Customer if the Interconnection Customer's comments require the System Operator or Interconnecting Transmission Owner to perform additional analyses or make other significant modifications prior to the issuance of the final Interconnection Facilities Report. Upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, or any third party consultant retained by the Interconnection Customer supporting documentation, with workpapers, and databases or data developed in the preparation of the Interconnection Facilities Study. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/ disclosure requirements, such information may be provided directly to the Interconnection Customer.

#### **8.4 Meeting with Parties.**

Within ten (10) Business Days of providing a draft Interconnection Facilities Study report to Interconnection Customer, the System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Interconnection Facilities Study.

#### **8.5 Re-Study.**

If re-study of the Interconnection Facilities Study is required due to (i) a higher queued project dropping out of the queue, (ii) a modification of a higher queued project subject to Section 4.4, (iii) a re-assessment of the upgrade responsibilities of an Elective Transmission Upgrade associated with an Import Capacity Resource(s) or a Generating Facility after the Import Capacity Resource(s) or the Generating Facility receives a Capacity Supply Obligation in accordance with Section III.13 of the Tariff, or (iv) a modification to a transmission project included in the Base Case, the System Operator shall notify the Interconnection Customer and Interconnecting Transmission Owner in writing. Each re-study shall be conducted serially based on the Queue Position of each Interconnection Customer, and each re-study shall take no longer than sixty (60) Calendar Days from the date the re-study commences. Any cost of re-study

shall be borne by the Interconnection Customer being re-studied. If the original Interconnection Facilities Study is complete and the final invoice has been issued, the re-study shall be performed under a new Interconnection Facilities Study Agreement.

## **SECTION 9. ENGINEERING & PROCUREMENT (“E&P”) AGREEMENT.**

Prior to executing an ETU IA, an Interconnection Customer may request, in order to advance the implementation of its interconnection, and the Interconnecting Transmission Owner and any Affected Party shall offer the Interconnection Customer, an E&P Agreement that authorizes the Interconnecting Transmission Owner and any Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection. However, the Interconnecting Transmission Owner or any Affected Party shall not be obligated to offer an E&P Agreement if the Interconnection Customer is in Dispute Resolution as a result of an allegation that the Interconnection Customer has failed to meet any milestones or comply with any prerequisites specified in other parts of the ETU IP. The E&P Agreement is an optional procedure and it will not alter the Interconnection Customer’s Queue Position or Trial Operation Date. The E&P Agreement shall provide for the Interconnection Customer to pay the cost of all activities authorized by the Interconnection Customer, including a deposit of 100 percent of the estimated engineering and study costs, and to make advance payments or provide other satisfactory security for such costs.

The Interconnection Customer shall pay the cost of such authorized activities and any cancellation costs for equipment that is already ordered for its interconnection, which cannot be mitigated as hereafter described, whether or not such items or equipment later become unnecessary. If the Interconnection Customer withdraws its application for interconnection or an E&P Agreement is terminated by any Party, to the extent the equipment ordered can be canceled under reasonable terms, the Interconnection Customer shall be obligated to pay the associated cancellation costs. To the extent that the equipment cannot be reasonably canceled, the Interconnecting Transmission Owner or the Affected Party that is a party to an E&P Agreement may elect: (i) to take title to the equipment, in which event the Interconnecting Transmission Owner or relevant Affected Party shall refund the Interconnection Customer any amounts paid by the Interconnection Customer for such equipment and shall pay the cost of delivery of such equipment, or (ii) to transfer title to and deliver such equipment to the Interconnection Customer, in which event the Interconnection Customer shall pay any unpaid balance and cost of delivery of such equipment.

## **SECTION 10. OPTIONAL INTERCONNECTION STUDY.**

### **10.1 Optional Interconnection Study Agreement.**

On or after the date when the Interconnection Customer receives Interconnection System Impact Study report and no later than five (5) Business Days after the study results meeting to review the report, the Interconnection Customer may request in writing, and the System Operator in coordination with the Interconnecting Transmission Owner shall perform, an Optional Interconnection Study. The request shall describe the assumptions that the Interconnection Customer wishes the System Operator to study within the scope described in Section 10.2. Within five (5) Business Days after receipt of a request for an Optional Interconnection Study, the System Operator shall provide to the Interconnecting Transmission Owner and the Interconnection Customer an Optional Interconnection Study Agreement in the form of Appendix 5.

The Optional Interconnection Study Agreement shall: (i) specify the technical data that the Interconnection Customer must provide for each phase of the Optional Interconnection Study, (ii) specify the Interconnection Customer's assumptions as to which Interconnection Requests with earlier queue priority dates will be excluded from the Optional Interconnection Study case, and (iii) specify the System Operator's and Interconnecting Transmission Owner's estimate of the cost of the Optional Interconnection Study. To the extent known by the System Operator, such estimate shall include any costs expected to be incurred by any Affected System whose participation is necessary to complete the Optional Interconnection Study. The Optional Interconnection Study Agreement shall specify that Interconnection Customer is responsible for the actual cost of the Optional Interconnection Study, including the cost of developing the study agreement and its attachment(s). Notwithstanding the above, the System Operator and Interconnecting Transmission Owner shall not be required as a result of an Optional Interconnection Study request to conduct any additional Interconnection Studies with respect to any other Interconnection Request.

The Interconnection Customer shall execute the Optional Interconnection Study Agreement within ten (10) Business Days of receipt and deliver the Optional Interconnection Study Agreement, the required technical data and the refundable deposit for the Optional Interconnection Study to the System Operator. The deposit for the study shall be 100 percent of the estimated cost of the study. Any difference between the study deposit and the actual cost of the Optional Interconnection Study shall be paid by or refunded to

the Interconnection Customer, except as otherwise provided in Section 13.3. In accordance with Section 13.3, the System Operator and/or the Interconnecting Transmission Owner shall issue to the Interconnection Customer an invoice for the costs of the Optional Interconnection Study that have been incurred by the System Operator and/or the Interconnecting Transmission Owner for the Optional Interconnection Study and the study agreement and its attachments(s). The Interconnection Customer shall pay the invoiced amounts, to the extent such amounts are greater than the initial deposit, within thirty (30) Calendar Days of receipt of invoice. The System Operator shall continue to hold the amounts on deposits until settlement of the final invoice with the Interconnection Customer and the Interconnecting Transmission Owner.

## **10.2 Scope of Optional Interconnection Study.**

The Optional Interconnection Study will consist of a sensitivity analysis based on the assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement. The Optional Interconnection Study will also identify the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the results of the Optional Interconnection Study. The System Operator shall use Reasonable Efforts to coordinate the study with any Affected Systems that may be affected by the types of Interconnection Services that are being studied. The System Operator and Interconnecting Transmission Owner shall utilize existing studies to the extent practicable in conducting the Optional Interconnection Study.

The Optional Interconnection Study will consist of a short circuit analysis, a stability analysis, a power flow analysis, including thermal analysis and voltage analysis, a system protection analysis, and any other analyses that are deemed necessary by the System Operator in consultation with the Interconnecting Transmission Owner.

## **10.3 Optional Interconnection Study Procedures.**

The executed Optional Interconnection Study Agreement, the prepayment, and technical and other data called for therein must be provided to the System Operator and Interconnecting Transmission Owner within ten (10) Business Days of the Interconnection Customer receipt of the Optional Interconnection Study Agreement. The System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the Optional Interconnection Study within a mutually agreed-upon time period specified within the Optional Interconnection Study Agreement. If the System Operator and

Interconnecting Transmission Owner are unable to complete the Optional Interconnection Study within such time period, the System Operator shall notify the Interconnection Customer and provide an estimated completion date and an explanation of the reasons why additional time is required. In such circumstances, upon request, the System Operator and Interconnecting Transmission Owner shall provide the Interconnection Customer supporting documentation and workpapers and databases or data developed in the preparation of the Optional Interconnection Study to any third party consultant retained by the Interconnection Customer. The recipient(s) of such information shall be subject to the confidentiality provisions of Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. To the extent that any applicable information is not covered by any applicable confidentiality/disclosure requirements, such information may be provided directly to the Interconnection Customer.

#### **10.4 Meeting with Parties.**

Within ten (10) Business Days of providing an Optional Interconnection Study report to Interconnection Customer, System Operator will convene a meeting of the Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements to discuss the results of the Optional Interconnection Study.

#### **10.5 Interconnection Agreement Developed Based on Optional Interconnection Study.**

If the ETU IA for an Elective Transmission Upgrade is based on the results of an Optional Interconnection Study, the ETU IA shall reflect the conditions studied and any obligations that may involve: (i) additional studies if such conditions change, (ii) operational limits, or (iii) financial support for transmission upgrades.

### **SECTION 11. ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT (ETU IA).**

#### **11.1 Tender.**

Interconnection Customer shall tender comments or provide notice, in writing, to the System Operator and Interconnecting Transmission Owner that the Interconnection Customer has no comments on the draft Interconnection Facilities Study report or on the draft Interconnection System Impact Study report if the

Interconnection Customer waived the Interconnection Facilities Study, within thirty (30) Calendar Days of receipt of the report. Except as provided in the E&P Agreement or any mutual agreement by the entities that would be Parties to the ETU IA, the System Operator shall initiate the development of the ETU IA process within fifteen (15) Calendar Days after the comments are submitted or waived, by tendering to the Interconnection Customer a draft ETU IA, together with draft appendices completed by the System Operator, in conjunction with the Interconnecting Transmission Owner to the extent practicable. The draft ETU IA shall be in the form of the System Operator's Commission-approved standard form ETU IA which is in Appendix 6 to Schedule 25. The Interconnection Customer shall return the Interconnection Customer specific information required to complete the form of ETU IA, including the appendices, in Appendix 6 of Schedule 25 that the Interconnection Customer is willing to execute within thirty (30) Calendar Days after receipt of the draft from the System Operator.

### **11.2 Negotiation.**

Notwithstanding Section 11.1, at the request of the Interconnection Customer, the System Operator and Interconnecting Transmission Owner shall begin negotiations with the Interconnection Customer concerning the appendices to the ETU IA at any time after the Interconnection Facilities Study is complete or after the Interconnection System Impact Study is complete if the Interconnection Customer intends to waive the Interconnection Facilities Study. The System Operator, Interconnection Customer, and Interconnecting Transmission Owner shall negotiate concerning any disputed provisions of the appendices to the draft ETU IA for not more than sixty (60) Calendar Days after tender by the System Operator of the draft ETU IA pursuant to Section 11. If the Interconnection Customer determines that negotiations are at an impasse, it may request termination of the negotiations at any time after tender of the draft ETU IA pursuant to Section 11.1 and request submission of the unexecuted ETU IA with the Commission or initiate Dispute Resolution procedures pursuant to Section 13.5. If the Interconnection Customer requests termination of the negotiations, but within sixty (60) Calendar Days thereafter fails to request either the filing of the unexecuted ETU IA or initiate Dispute Resolution, it shall be deemed to have withdrawn its Interconnection Request. Unless otherwise agreed by the Parties, if the Interconnection Customer has not executed the ETU IA, requested filing of an unexecuted ETU IA, or initiated Dispute Resolution procedures pursuant to Section 13.5 within sixty (60) Calendar Days of tender of by the System Operator of the draft ETU IA pursuant to Section 11.1, it shall be deemed to have withdrawn its Interconnection Request. The System Operator and Interconnecting Transmission Owner shall provide to the Interconnection Customer a final ETU IA within fifteen (15) Business Days after the mutually agreed completion of the negotiation process.



### **11.3 Evidence to be Provided by Interconnection Customer; Execution and Filing of ETU IA.**

#### **11.3.1 Evidence to be Provided by Interconnection Customer.**

**11.3.1.1 Site Control.** Within fifteen (15) Business Days after receipt of the final ETU IA, the Interconnection Customer shall provide (A) to the System Operator, reasonable evidence of continued Site Control, or (B) to the Interconnecting Transmission Owner posting of \$250,000 non-refundable additional security, which shall be applied toward future construction costs. If multiple Interconnecting Transmission Owners, the \$250,000 non-refundable additional security shall be distributed evenly among them. Interconnection Customer does not need to demonstrate Site Control where the Interconnection Request is for (i) a modification to the Interconnection Customer's existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility and the Interconnection Customer has certified in the Interconnection Request that it has Site Control and that the modification proposed in the Interconnection Request does not require additional real property, or (ii) a modification of an existing Pool Transmission Facility that is not owned by the Interconnection Customer.

**11.3.1.2 Development Milestones.** Within fifteen (15) Business Days after receipt of the final ETU IA, the Interconnection Customer also shall provide to the System Operator reasonable evidence that one or more of the following milestones in the development of the Elective Transmission Upgrade, to be elected by the Interconnection Customer, has been achieved: (i) the submission of filings for regulatory siting; (ii) execution of a contract for the engineering for, procurement of major equipment for, or construction of, the Elective Transmission Upgrade; (iii) execution of an agreement regarding the use of the Elective Transmission Upgrade; (iv) application for environmental or land use permit.

At the same time, the Interconnection Customer with an Interconnection Request that was not studied using Clustering, shall commit to a schedule for the payment of upgrades identified in the Interconnection Studies or an E&P Agreement and either: (A) provide evidence of approvals for all Major Permits for the Elective Transmission Upgrade, as defined in Section III.13.1.1.2.2(a) of the Tariff, or (B) provide to the Interconnecting Transmission Owner, in the form acceptable to the Interconnecting Transmission Owner, a refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades identified in the Interconnection Studies or an E&P Agreement, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for

an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final ETU IA. If the Interconnection Customer selects option (B) above, it shall also commit in the ETU IA to the achievement of: (i) milestones for the completion of Major Permit approvals, and (ii) in the case of a CNR Interconnection Request, milestones to align the ETU IA with the fulfillment of terms outlined in Section III.13 of the Tariff for participation in the Forward Capacity Market.

Within fifteen (15) Business Days after receipt of the final ETU IA, an Interconnection Customer with an Interconnection Request studied using Clustering that provided the additional Cluster Participation Deposit in accordance with Section 4.2.4.4 shall provide to the Interconnecting Transmission Owner, in cash, a potentially non-refundable deposit of twenty (20) percent of the total costs for the Interconnection Facilities and other upgrades, including any CETUs, identified in the CFAC, unless the Interconnecting Transmission Owner's expenditure schedule for the Interconnection Facilities and other upgrades calls for an initial payment of greater than twenty (20) percent of the total upgrade costs, in which case the scheduled initial payment must instead be made within the fifteenth Business Day after receipt of the final ETU IA. If the Interconnection Customer does not submit this deposit (or make the initial payment) by the fifteenth Business Day after receipt of the final ETU IA, the Interconnection Request shall be automatically withdrawn from the interconnection queue without further opportunity to cure, and the Interconnection Customer's initial and additional Cluster Participation Deposits shall become non-refundable. The non-refundable initial and additional Cluster Participation Deposits shall be re-allocated, according to the cost allocation methodology contained in Schedule 11, to the Interconnection Customers with Interconnection Requests included in the cluster at time the facilities proposed in the Interconnection Requests achieve Commercial Operation. If an Interconnection Request is withdrawn after the Interconnection Customer's payment of twenty (20) percent of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner, then the payment shall be used to offset the costs of the CETU. Any unspent payments of the total cost responsibility for the upgrades to the Interconnecting Transmission Owner will be refunded to the respective Interconnection Customers that executed the Interconnection Agreement and provided to the Interconnecting Transmission Owner the twenty (20) percent deposit (or initial payment) if all the associated Interconnection Requests are withdrawn from the interconnection queue and the associated Interconnection Agreements are terminated.

**11.3.2 Execution and Filing of ETU IA.** Within fifteen (15) Business Days after receipt of the final ETU IA, (i) the Interconnection Customer and Interconnecting Transmission Owner shall execute three

(3) originals of the tendered ETU IA, and return them to the System Operator, who will send an original to Interconnecting Transmission Owner and Interconnection Customer; or (ii) the Interconnection Customer shall request in writing that the System Operator and the Interconnecting Transmission Owner jointly file with the Commission an ETU IA in unexecuted form. As soon as practicable, but not later than ten (10) Business Days after receiving either the executed originals of the tendered ETU IA (if it does not conform with a Commission-approved standard form of interconnection agreement) or the request to file an unexecuted ETU IA, the System Operator and Interconnecting Transmission Owner, in accordance with Section 11.3.3 or Section 11.3.4, as appropriate, shall jointly file the ETU IA with the Commission, together with its explanation of any matters as to which the System Operator, Interconnection Customer or Interconnecting Transmission Owner disagree and support for the costs that the Interconnecting Transmission Owner proposes to charge to the Interconnection Customer under the ETU IA. An unexecuted ETU IA should contain terms and conditions deemed appropriate by the System Operator and Interconnecting Transmission Owner for the Interconnection Request. If the Parties agree to proceed with design, procurement, and construction of facilities and upgrades under the agreed-upon terms of the unexecuted ETU IA, they may proceed pending Commission action.

With respect to the interconnection of an Interconnection Customer under Schedule 25, the ETU IA shall be a three-party agreement among the Interconnecting Transmission Owner, the System Operator and the Interconnection Customer. If the Interconnecting Transmission Owner, System Operator and Interconnection Customer agree to the terms and conditions of a specific ETU IA, or any amendments to such an ETU IA, then the System Operator and Interconnecting Transmission Owner shall jointly file the executed ETU IA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act. To the extent the Interconnecting Transmission Owner, System Operator and Interconnection Customer cannot agree to proposed variations from the standard form of ETU IA in Appendix 6 or cannot otherwise agree to the terms and conditions of the ETU IA for such Elective Transmission Upgrade, or any amendments to such an ETU IA, then the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted ETU IA, or amendment thereto, with the Commission under Section 205 of the Federal Power Act and shall identify the areas of disagreement in such filing, provided that, in the event of disagreement on terms and conditions of the ETU IA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of the Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the

Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on such terms and conditions.

**11.3.3** The Interconnecting Transmission Owner, acting on its own or jointly with the System Operator, may initiate a filing to amend this ETU IP and the standard form of ETU IA in Appendix 6 under Section 205 of the Federal Power Act and shall include in such filing the views of System Operator, provided that the standard applicable under Section 205 of the Federal Power Act shall apply only to the Interconnecting Transmission Owner's position on any financial obligations of the Interconnecting Transmission Owner or the Interconnection Customer(s), and any provisions related to physical impacts of the interconnection on the Interconnecting Transmission Owner's transmission facilities or other assets.

#### **11.4 Commencement of Interconnection Activities.**

If the Interconnection Customer executes the final ETU IA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall perform their respective obligations in accordance with the terms of the ETU IA, subject to modification by the Commission. Upon submission of an unexecuted ETU IA, the System Operator, Interconnection Customer and Interconnecting Transmission Owner shall promptly comply with the unexecuted ETU IA, subject to modification by the Commission.

#### **11.5 Other Regulatory Arrangements.**

Prior to achieving Commercial Operation, the Elective Transmission Upgrade must be under the Operational Authority of the System Operator pursuant to a Transmission Operating Agreement and establish a schedule under the ISO OATT pursuant to which service will be offered over the Elective Transmission Upgrade.

## **SECTION 12. CONSTRUCTION OF INTERCONNECTING TRANSMISSION OWNER INTERCONNECTION FACILITIES AND NETWORK UPGRADES.**

### **12.1 Schedule.**

The Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party shall negotiate in good faith concerning a schedule for the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades.

## **12.2 Construction Sequencing.**

**12.2.1 General.** In general, the Trial Operation Date of an Interconnection Customer seeking interconnection to the Administered Transmission System will determine the sequence of construction of Network Upgrades.

**12.2.2 Advance Construction of Network Upgrades that are an Obligation of an Entity other than the Interconnection Customer.** An Interconnection Customer with an executed or unexecuted, but filed with the Commission, ETU IA, in order to maintain its Trial Operation Date, may request that the Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) were assumed in the Interconnection Studies for such Interconnection Customer, (ii) are necessary to support such Trial Operation Date, and (iii) would otherwise not be completed, pursuant to a contractual obligation of an entity other than the Interconnection Customer that is seeking interconnection to the Administered Transmission System, in time to support such Trial Operation Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party; (i) any associated expediting costs and (ii) the cost of such Network Upgrades.

The Interconnecting Transmission Owner or appropriate Affected Party will refund to the Interconnection Customer both the expediting costs and the cost of Network Upgrades, in accordance with Article 11.4 of the ETU IA. Consequently, the entity with a contractual obligation to construct such Network Upgrades shall be obligated to pay only that portion of the costs of the Network Upgrades that the Interconnecting Transmission Owner or appropriate Affected Party has not refunded to the Interconnection Customer. Payment by that entity with a contractual obligation to construct such Network Upgrades shall be due on the date that it would have been due had there been no request for advance construction. The Interconnecting Transmission Owner or appropriate Affected Party shall forward to the Interconnection Customer the amount paid by the entity with a contractual obligation to construct the Network Upgrades

as payment in full for the outstanding balance owed to the Interconnection Customer. The Interconnecting Transmission Owner or appropriate Affected Party then shall refund to that entity the amount that it paid for the Network Upgrades, in accordance with Article 11.4 of the ETU IA.

**12.2.3 Advancing Construction of Network Upgrades that are Part of the Regional System Plan of the System Operator.** An Interconnection Customer with an ETU IA, in order to maintain its Trial Operation Date, may request that Interconnecting Transmission Owner or appropriate Affected Party advance to the extent necessary the completion of Network Upgrades that: (i) are necessary to support such Trial Operation Date and (ii) would otherwise not be completed, pursuant to the Regional System Plan, in time to support such Trial Operation Date. Upon such request, the Interconnecting Transmission Owner or appropriate Affected Party will use Reasonable Efforts to advance the construction of such Network Upgrades to accommodate such request; provided that the Interconnection Customer commits to pay the Interconnecting Transmission Owner or appropriate Affected Party any associated expediting costs.

**12.2.4 Amended Interconnection System Impact Study.** An Interconnection System Impact Study will be amended to determine the facilities necessary to support the requested Trial Operation Date. This amended study will include those transmission and Generating Facilities that are expected to be in service on or before the requested Trial Operation Date. The ETU IA will also be amended to reflect the results of the Amended Interconnection System Impact Study and any changes in obligations, including financial support, of the Parties.

## **SECTION 13. MISCELLANEOUS.**

### **13.1 Confidentiality.**

Confidential Information shall include, without limitation, all information treated as confidential under the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by any of the Parties to the others prior to the execution of an ETU IA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the

Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by any Party, the other Party(ies) shall provide in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

**13.1.1 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of the ETU IA; or (6) is required, in accordance with Section 13.1.6, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under the ETU IA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Parties that it no longer is confidential.

**13.1.2 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), employees, consultants, or to parties who may be or considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with these procedures, unless such person has first been advised of the confidentiality provisions of this Section 13.1 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Section 13.1.

**13.1.3 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by any Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**13.1.4 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**13.1.5 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under these procedures or its regulatory requirements.

**13.1.6 Order of Disclosure.** If a court or a Government Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of the ETU IA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**13.1.7 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Section 13.1. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its obligations under this Section 13.1, which equitable relief shall be granted without bond or proof of damages, and the receiving Party shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Section 13.1, but shall be in addition to all other remedies available at law or in equity.



The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Section 13.1.

**13.1.8 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Section 13.1 to the contrary, and pursuant to 18 CFR section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to the ETU IP, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR. section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party(ies) to the ETU IA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner, consistent with applicable state rules, regulations and Section 13.1.

**13.1.9** Subject to the exception in Section 13.1.8, any information that a Party claims is competitively sensitive, commercial or financial information (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this ETU IP or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a subregional, regional or national reliability organization or planning group. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Party’s(ies’) Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in

writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

**13.1.10** This provision shall not apply to any information that was or is hereafter in the public domain (except as a result of a Breach of this provision).

**13.1.11** The System Operator and Interconnecting Transmission Owner shall, at Interconnection Customer's election, destroy, in a confidential manner, or return the Confidential Information provided at the time when Confidential Information is no longer needed.

## **13.2 Delegation of Responsibility.**

The System Operator and Interconnecting Transmission Owner, or any Affected Party may use the services of subcontractors as it deems appropriate to perform its obligations under this ETU IP. The Party using the services of a subcontractor shall remain primarily liable to the Interconnection Customer for the performance of such subcontractors and compliance with its obligations of this ETU IP. The subcontractor shall keep all information provided confidential and shall use such information solely for the performance of such obligation for which it was provided and no other purpose.

## **13.3 Obligation for Study Costs.**

The System Operator and the Interconnecting Transmission Owner shall charge, and the Interconnection Customer shall pay, the actual costs of the Interconnection Studies. Any difference between the study deposit and the actual cost of the applicable Interconnection Study shall be paid by or refunded, except as otherwise provided herein, to the Interconnection Customer or offset against the cost of any future Interconnection Studies associated with the applicable Interconnection Request prior to beginning of any such future Interconnection Studies. Any invoices for Interconnection Studies shall include a detailed and itemized accounting of the cost of each Interconnection Study. The Interconnection Customer shall pay any such undisputed costs within thirty (30) Calendar Days of receipt of an invoice therefore. The System Operator and Interconnecting Transmission Owner shall not be obligated to perform or continue to perform any studies unless the Interconnection Customer has paid all undisputed amounts in compliance herewith.

## **13.4 Third Parties Conducting Studies.**

If (i) at the time of the signing of an Interconnection Study Agreement there is disagreement as to the estimated time to complete an Interconnection Study, (ii) the Interconnection Customer receives notice pursuant to Sections 6.3, 7.4, 8.3 or 10.3 that the System Operator or Interconnecting Transmission Owner will not complete an Interconnection Study within the applicable timeframe for such Interconnection Study, or (iii) the Interconnection Customer receives neither the Interconnection Study nor a notice under Sections 6.3, 7.4 or 8.3 within the applicable timeframe for such Interconnection Study, then the Interconnection Customer may request, which request will not be unreasonably denied, that the System Operator and Interconnecting Transmission Owner utilize a third party consultant reasonably acceptable to the System Operator, Interconnection Customer, Interconnecting Transmission Owner and any appropriate Affected Party, to perform such Interconnection Study under the direction of the System Operator or Interconnecting Transmission Owner as applicable. At other times, System Operator or Interconnecting Transmission Owner may also utilize a third party consultant to perform such Interconnection Study, either in response to a general request of the Interconnection Customer, or on its own volition. In all cases, use of a third party consultant shall be in accord with Article 26 of the ETU IA (Subcontractors) and limited to situations where the System Operator or Interconnecting Transmission Owner determines that doing so will help maintain or accelerate the study process for the Interconnection Customer's pending Interconnection Request and not interfere with the System Operator and Interconnecting Transmission Owner's progress on Interconnection Studies for other pending Interconnection Requests. In cases where the Interconnection Customer requests use of a third party consultant to perform such Interconnection Study, the Interconnection Customer, System Operator and Interconnecting Transmission Owner shall negotiate all of the pertinent terms and conditions, including reimbursement arrangements and the estimated study completion date and study review deadline. The System Operator and Interconnecting Transmission Owner shall convey all workpapers, data bases, study results and all other supporting documentation prepared to date with respect to the Interconnection Request as soon as soon as practicable upon the Interconnection Customer's request subject to the confidentiality provision in Section 13.1 and the ISO New England Information Policy, as well as any other applicable requirement under Applicable Laws and Regulations regulating the disclosure or confidentiality of such information. In any case, such third party contract may be entered into with the System Operator, Interconnection Customer, or Interconnecting Transmission Owner at the System Operator and Interconnecting Transmission Owner's discretion. In the case of (iii) the Interconnection Customer maintains its right to submit a claim to Dispute Resolution to recover the costs of such third party study. Such third party consultant shall be required to comply with this ETU IP, Article 26 of the ETU IA (Subcontractors), and the relevant Tariff procedures and protocols as would apply if the System

Operator and Interconnecting Transmission Owner were to conduct the Interconnection Study and shall use the information provided to it solely for purposes of performing such services and for no other purposes.

The System Operator and Interconnecting Transmission Owner shall cooperate with such third party consultant and Interconnection Customer to complete and issue the Interconnection Study in the shortest reasonable time.

### **13.5 Disputes.**

**13.5.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with the ETU IA, the ETU IP, or their performance, such Party (the “Disputing Party”) shall provide the other Party(ies) with written notice of the dispute or claim (“Notice of Dispute”). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party’s(ies’) receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, after thirty (30) Calendar Days, then (i) in the case of disputes arising out of or in conjunction with the ETU IA, the System Operator and Interconnecting Transmission Owner shall jointly file an unexecuted ETU IA, or amendment thereto, with the Commission in accordance with Section 11.3.4, or (ii) in the case of disputes arising out of or in connection with any other matter regarding the administration of the ETU IP, the System Operator may terminate the Interconnection Request and the Interconnection Customer may seek relief pursuant to Section 206 of the Federal Power Act. Each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this Schedule 25.

**13.5.2 External Arbitration Procedures.** Any arbitration initiated under these procedures shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be

knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Section 13, the terms of this Section 13 shall prevail.

**13.5.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons for such decision. The arbitrator(s) shall be authorized only to interpret and apply the provisions of the ETU IA and ETU IP and shall have no power to modify or change any provision of the ETU IA and ETU IP in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.

**13.5.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three-member panel and one-third of any associated arbitration costs; or (2) one-third the cost of the single arbitrator jointly chosen by the Parties and one-third of any associated arbitration costs.

## **13.6 Local Furnishing Bonds.**

**13.6.1 Facilities Financed by Local Furnishing Bonds.** This provision is applicable only to interconnections associated with facilities financed for the local furnishing of electric energy with tax-exempt bonds, as described in Section 142(f) of the Internal Revenue Code ("local furnishing bonds"). Notwithstanding any other provision of this ETU IA and ETU IP, the Interconnecting Transmission Owner shall not be required to provide Interconnection Service to the Interconnection Customer pursuant to this ETU IA and ETU IP if the provision of such Interconnection Service would jeopardize the tax-

exempt status of any local furnishing bond(s) used to finance the Interconnecting Transmission Owner's facilities that would be used in providing such Interconnection Service.

**13.6.2 Alternative Procedures for Requesting Interconnection Service.** If the Interconnecting Transmission Owner determines that the provision of Interconnection Service requested by the Interconnection Customer would jeopardize the tax-exempt status of any local furnishing bond(s) used to finance its facilities that would be used in providing such Interconnection Service, it shall advise the Interconnection Customer within thirty (30) Calendar Days of receiving notice of the Interconnection Request. The Interconnection Customer thereafter may renew its Interconnection Request using the process specified in the Tariff.

## **APPENDICES TO ETU IP**

- APPENDIX 1 INTERCONNECTION REQUEST FOR ELECTIVE TRANSMISSION UPGRADE
- APPENDIX 2 INTERCONNECTION FEASIBILITY STUDY AGREEMENT
- APPENDIX 3 INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT
- APPENDIX 4 INTERCONNECTION FACILITIES STUDY AGREEMENT
- APPENDIX 5 OPTIONAL INTERCONNECTION STUDY AGREEMENT
- APPENDIX 6 ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT

**APPENDIX 1**  
**INTERCONNECTION REQUEST**  
**FOR ELECTIVE TRANSMISSION UPGRADE**

The undersigned Interconnection Customer submits this request to interconnect its Elective Transmission Upgrade (“ETU”) to the Administered Transmission System under Schedule 25 – Elective Transmission Upgrade Interconnection Procedures (“ETU IP”) of Section II to the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”). Capitalized terms have the meanings specified in the Tariff.

---

---

**PROJECT INFORMATION**

Proposed Project Name: \_\_\_\_\_

1. Description of the ETU objective (*select one of a, b, c, d, or e*):

1. \_\_\_\_ Addition of a specific technology:

1. Type of new facility (*check all applicable*):

\_\_\_\_DC \_\_\_\_AC \_\_\_\_controllable \_\_\_\_non-controllable \_\_\_\_Other (Explain):

2. Address(es) or Location(s) of the ETU (including Town/City, County & State or a map detailing such information):

3. Location(s) of the proposed Point(s) of Interconnection and associated terminals:



**4. Transmission transfer capability, including:**

- 1. Energy transfer capability and direction(s) of flow**
- 2. Capacity transfer capability and direction(s) of flow**
- 3. Other:**

**5. Indicate whether the study should consider:**

- 1. Both directions of flow**
- 2. One direction of flow only**
- 3. Explain:**

**2. \_\_\_\_ Modification to existing PTF, MTF or OTF that is part of or interconnected to the Administered Transmission System. Explain.**

**3. \_\_\_\_ Specific performance objective associated with specific Generating Facility(ies)/resources:**

**1. Identify Generating Facility(ies)/resources, including Queue Positions:**

**ii) Identify the specific performance goals/objectives of the ETU (e.g., energy integration):**

4. \_\_\_\_ **Increase in transfer capability between points, including:**

1.      **Transfer points (from/to)**
2.      **Energy transfer capability increase and direction(s) of flow**
3.      **Capacity transfer capability increase and direction(s) of flow**
4.      **Other**

5. \_\_\_\_ **Other specific and clearly described discrete objective:**

6. **Projected Dates:**

1. **Commercial Operation:** \_\_\_\_\_
2. **Trial Operation:** \_\_\_\_\_
3. **In-Service:** \_\_\_\_\_

4. **This request is for (*check either Internal ETU or External ETU options*):**

1) \_\_\_\_ **An Internal ETU (*check one of i or ii*):**

1.      \_\_\_\_ **The interconnection of proposed new (*check one*):**
  1.      \_\_\_\_ **PTF;**
  2.      \_\_\_\_ **OTF or MTF.**

2. \_\_\_\_ A modification to, an increase in the transmission capability of, or other specific proposed objective associated with (*check one*):

1. \_\_\_\_ existing internal PTF;

2. \_\_\_\_ existing internal MTF or OTF that is interconnected to the Administered Transmission System.

2) \_\_\_\_ An External ETU (*check i or ii or iii and specify the other Control Area interconnecting to \_\_\_\_\_*)

1. \_\_\_\_ The interconnection of proposed new (*check one*):

1. \_\_\_\_ PTF;

2. \_\_\_\_ OTF or MTF.

2. \_\_\_\_ A modification to, an increase in the transmission capability of, or other specific proposed objective associated with (*check one*):

1. \_\_\_\_ existing external PTF

2. \_\_\_\_ existing external MTF or OTF.

3. \_\_\_\_ A change from NI Interconnection Service to CNI Interconnection Service for a controllable MTF or OTF (no physical change to facilities).

1. For External controllable OTF or MTF in the importing direction, applicant requests (*check one*):

1. \_\_\_\_ NI Interconnection Service (i.e., energy only): \_\_\_\_ MW

2. \_\_\_\_ CNI Interconnection Service (i.e., capacity and energy): \_\_\_\_ MW

1. If CNI Interconnection Service, does the Interconnection Customer request Long Lead Facility treatment? \_\_\_\_ Yes or \_\_\_\_ No

If yes, provide to ISO-NE, together with this Interconnection Request, the Long Lead Facility deposit and other required information as specified in Section 3.2.3 of the ETU IP, including a justification for Long Lead Facility treatment.

**3. Evidence of Site Control (*check one*):**

- a. ☐ If for CNI Interconnection Service, Site Control is included with this Interconnection Request form, as required.
- b. ☐ If for NI Interconnection Service (*check one*):
  - 1. ☐ Site Control is provided with this Interconnection Request form.
  - 2. ☐ In lieu of evidence of Site Control, a \$10,000 deposit is provided with this Interconnection Request form (refundable within the cure period as described in Section 3.3.3 of the ETU IP).
  - 3. ☐ Site Control is not provided because the proposed modification is either:
    - a) to existing MTF, OTF or PTF and by checking this option, the Interconnection Customer certifies that the proposed modification does not require additional real property, or
    - b) to PTF and the Interconnection Customer does not own such PTF.

**4. This Interconnection Customer requests (*check one*):**

- 4) ☐ An Interconnection Feasibility Study to be completed as a separate and distinct study, or
- 5) ☐ An Interconnection System Impact Study with the Feasibility Study to be performed as the first step of the study.
- 6) If seeking CNI Interconnection Service, does the Interconnection Customer request a preliminary non-binding, analysis to identify potential upgrades that may be necessary to qualify resources for participation in a Forward Capacity Auction? ☐ Yes or ☐ No

*Note: The above selection of a or b is not required as part of the initial Interconnection Request; however, the Interconnection Customer shall select either option and may revise this selection up to within five (5) Business Days following the Scoping Meeting.*

5. The ETU technical data specified within the applicable attachment to this form (*check one*):

- 1) \_\_\_\_ Is included with the submittal of this Interconnection Request.
- 2) \_\_\_\_ Will be provided on or before the execution and return of the Feasibility Study Agreement (Attachment B) or the System Impact Study Agreement (Attachment A), as applicable.

---

---

**CUSTOMER INFORMATION**

	<b><u>Interconnection Customer</u></b>	<b><u>Customer Representative</u></b>
<b>Company Name:</b>		
<b>Address:</b> (PO Box)		
(Street)		
(City, State, ZIP)		
<b>Phone:</b>		
<b>FAX:</b>		
<b>Email:</b>		

ISO Customer ID# (if available): \_\_\_\_\_

---

---

**This Interconnection Request is submitted by:**

**Authorized Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Name (type or print):** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Company:** \_\_\_\_\_

---

---

*In order for an Interconnection Request to be considered a valid request, it must:*

- (a) Be accompanied by a deposit of \$50,000.00 that is provided electronically and which may be refundable in accordance with Section 3.3.1 of the ETU IP;*
- (b) For CNI Interconnection Service, include documentation demonstrating Site Control. If for NI Interconnection Service, demonstrate Site Control or post an additional deposit of \$10,000. If the Interconnection Customer with an Interconnection Request for NI Interconnection Service demonstrates Site Control within the cure period specified in Section 3.3.3 of the ETU IP, the additional deposit of \$10,000 shall be refundable (An Interconnection Customer does not need to demonstrate Site Control for an Interconnection Request for a modification to its existing PTF, MTF or OTF facility where the Interconnection Customer has certified that it has Site Control and that the proposed modification does not require additional real property);*
- (c) Include a detailed map, such as a map of the quality produced by the U.S. Geological Survey, which clearly indicates the site of the new facility and pertinent surrounding structures;*
- (d) Include a one-line diagram of the facilities (2 copies);*
- (e) Include all information required on the Interconnection Request form and any attachments thereto; and*
- (f) Include the deposit and all information required for Long Lead Facility treatment, if such treatment is requested in accordance with Section 3.2.3 of the ETU IP.*

*In addition, within sixty (60) days of submitting an Interconnection Request to the System Operator, the Interconnection Customer with a request for an External ETU, shall provide evidence that it has submitted a valid request with the other Control Area to which it seeks to interconnect.*

---

All Interconnection Requests must be sent to the System Operator via the Interconnection Request Tracking Tool or IRTT, a web-based application for submitting, tracking and viewing Interconnection Requests available on the ISO New England website.

**ISO New England Inc. Use**

Date Elective Transmission Upgrade Request Received: \_\_\_\_\_

Received By: \_\_\_\_\_

☐ Deficient

Date Cured: \_\_\_\_\_

Date Deemed Valid Application: \_\_\_\_\_

Deemed Valid By: \_\_\_\_\_



Attachment A (page 1)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

**The technical data required below must be submitted no later than the date of execution of the System Impact Study Agreement pursuant to Section 7.2 of the ETU IP. Submit additional data sheets as necessary.**

**ELECTIVE TRANSMISSION UPGRADES:**

<b>GEOGRAPHIC MAP</b>
Geographic map which clearly illustrates the location of the proposed Elective Transmission Upgrade facilities and which includes the location of the proposed Point(s) of Interconnection and a specific transmission line or transmission cable route if applicable.
<b>ONE LINE DIAGRAM</b>
Detailed one-line diagram of the proposed Elective Transmission Upgrades facilities showing the connectivity between all new proposed equipment (i.e., circuit breakers, instrument transformers, surge arresters, transformers, shunt-connected capacitor banks, shunt-connected reactors, dynamic reactive power supply systems, transmission lines, etc.) and the proposed bus configuration at the Point(s) of Interconnection. Equipment grounding configuration should be depicted on the one-line (i.e., for transformers show winding and grounding arrangement)
<b>PROPOSED POINT(S) OF INTERCONNECTION</b> <i>(include additional points as necessary)</i>
Point of Interconnection A:
Voltage Level: _____ kV
Point of Interconnection B:



Attachment A (page 2)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Voltage Level: _____ Kv
Point of Interconnection C:
Voltage Level: _____ kV
<b>AC TRANSMISSION LINE DATA</b>  <i>(include data for segments between the POI and converter station(s) as necessary)</i>
Transmission line length: _____ Miles
AC transmission tower design illustrating tower type, conductor type, number of conductors per bundle, spacing of conductors within bundle, phase spacing between conductors or conductor bundles, and conductor or conductor bundle clearances.
Voltage level: _____ kV
Transmission line MVA base: _____ MVA
Positive sequence impedances on transmission line MVA base:  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Zero sequence impedances on transmission line MVA base):  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Line Rating: Normal/LTE/STE Rating _____ MVA / _____ MVA / _____ MVA

Attachment A (page 3)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection System Impact Study

<b>TRANSFORMER DATA</b>  <i>(include data for converter station power transformer(s) as necessary)</i>
Transformer Rating: OA/FA/FOA Rating _____ MVA / _____ MVA / _____ MVA
Voltage Ratio: High-side/Low-side/Tertiary _____ kV / _____ kV / _____ kV
Winding Connections (Delta, Wye, or Wye-Grounded): High-side Winding / Low-side Winding / Tertiary Winding _____ / _____ / _____
Fixed or Variable Taps:
Tap Range:
Two-Winding Transformer Impedances: Positive Sequence Impedance on transformer OA MVA base: _____ % _____ X/R Zero Sequence Impedance on transformer OA MVA base: _____ % _____ X/R
Three-Winding Transformer Impedances:
Positive Sequence Impedance on transformer OA MVA base Z1 <sub>H-L</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>H-T</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>L-T</sub> (on self-cooled MVA rating) _____ %, X/R _____

Attachment A (page 4)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Zero Sequence Impedance on transformer OA MVA base  $Z_{0_{H-L}}$ (on self-cooled MVA rating) _____ %, X/R _____  $Z_{0_{H-T}}$ (on self-cooled MVA rating) _____ %, X/R _____  $Z_{0_{L-T}}$ (on self-cooled MVA rating) _____ %, X/R _____
<b>FIXED OR SWITCHED SHUNT CAPACITOR BANK DATA</b>
Capacitor Bank Rating: _____ MVar
Positive sequence susceptance on capacitor bank rating base: B: _____ p.u.
Zero sequence susceptance on capacitor bank rating base: B: _____ p.u.
<b>FIXED OR SWITCHED SHUNT REACTOR DATA</b>
Nameplate Reactor Rating: _____ MVar
Positive sequence susceptance on reactor rating base: B: _____ p.u.
Zero sequence susceptance on reactor rating base: B: _____ p.u.
<b>DYNAMIC SHUNT REACTIVE SUPPLY SYSTEM</b>
Device Type (i.e., SVC, STATCOM, etc.):
Reactive power supply reference point:
Maximum leading reactive power supply capability: _____ MVar

Attachment A (page 5)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Maximum lagging reactive power supply capability: _____ MVar
<b>DC TRANSMISSION SYSTEMS (LINE-COMMUTATED CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW    _____ MVA
Minimum power transmission capacity: _____ MW
Maximum power transmission ramp rate: _____ MW/min
Point-to-point or back-to-back transmission:
Monopolar or bipolar transmission configuration:
Unidirectional or bidirectional power transmission:  (identify rectifier station for detail to be submitted below):
Rated DC voltage: _____ kV
Rated DC current: _____ A
Power controlling converter station and real power reference location:
Converter station losses (including auxiliary power demand) at nameplate power:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ kW</span> <span>Inverter: _____ kW</span> </div>
Transmission line or cable losses at nameplate power: _____ kW
Nominal rectifier firing angle (alpha): _____ deg
Nominal inverter extinction angle (gamma): _____ deg

Attachment A (page 6)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Converter station total reactive power supply (including filtering system) at nameplate active power:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVar</span> <span>Inverter: _____ MVar</span> </div>
Number of switched filter or reactive power supply devices:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____</span> <span>Inverter: _____</span> </div>
Size of largest switched filter or reactive power supply device:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVar</span> <span>Inverter: _____ MVar</span> </div>
DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.
DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.
Pole conductor resistance at maximum operating temperature: _____ ohms
DMNR conductor resistance at maximum operating temperature : _____ ohms
<b>DC TRANSMISSION SYSTEMS (VOLTAGE SOURCE CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW    _____ MVA
Point-to-point or back-to-back transmission:

Attachment A (page 7)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

Transmission configuration (i.e., mono-pole, bi-pole or other):
Unidirectional or bidirectional power transmission:  (identify rectifier station for detail to be submitted below):
Maximum power transmission ramp rate: _____ MW/min
Rated DC voltage: _____ kV
Rated DC current: _____ A
Real power controlling converter and reference location:
Converter station losses (including auxiliary power demand) at nameplate power: _____ kW
Transmission line or cable losses at nameplate power: _____ kW
Passive filter size:  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>Rectifier:</span> <span>Fixed: ____ MVar   Switched at de-block: ____ MVar</span> </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>Inverter:</span> <span>Fixed: ____ MVar   Switched at de-block: ____ MVar</span> </div>
Maximum converter station leading reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:  <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>Rectifier: _____ MVar</span> <span>Inverter: _____ MVar</span> </div>

Attachment A (page 8)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection System Impact Study

<p>Maximum converter station lagging reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:</p> <p style="text-align: center;">Rectifier: _____ MVar      Inverter: _____ MVar</p>
<p>Provide reactive capability curve.</p>
<p>DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.</p>
<p>DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.</p>
<p>Pole conductor resistance at maximum operating temperature: _____ ohms</p>
<p><b>POWER SYSTEM SIMULATION MODELS</b></p>
<p>Completed, fully-functioning, public (<i>i.e.</i>, non-proprietary or non-confidential) Siemens PTI's ("PSS/E") power flow models or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flows ("PSLF") data sheet, must be supplied with this Attachment A. If additional public data sheets are more appropriate to the proposed device, then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.</p> <p>If a PSCAD model is deemed required at the Scoping Meeting, then the PSCAD model must be provided to the System Operator within ninety (90) Calendar Days of the executed Interconnection System Impact Study Agreement. A benchmarking analysis, consistent with the requirements in the ISO New England Planning Procedures, confirming acceptable performance of the PSS/E model in comparison to the PSCAD model, shall be provided at the time PSCAD model is submitted.</p>

<b>OTHER TRANSMISSION FACILITY DATA</b>
System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Facilities Study.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment A to the Interconnection Request is true and accurate.

For Interconnection Customer:\_\_\_\_\_ Date:\_\_\_\_\_





### **CLUSTER SYSTEM IMPACT STUDY APPLICATION FORM**

The undersigned Interconnection Customer submits this form to request the inclusion of the Interconnection Request for its Elective Transmission Upgrade in a Cluster Interconnection System Impact Study pursuant to Section 4.2.3.2.2 of this ETU IP.

To be included in a Cluster Interconnection System Impact Study, the following must be submitted together with this form to the System Operator by the Cluster Entry Deadline:

1. Project Information:

1.3 Project Name: \_\_\_\_\_

1.4 Queue Position: \_\_\_\_\_

1.5 Is the Interconnection Request contractually associated with an Interconnection Request for a Generating Facility? Yes \_\_\_\_ No \_\_\_\_

If yes, identify Queue Position of the associated Interconnection Request and provide evidence of the contractual commitment. Queue Position No.: \_\_\_\_\_

2. Initial Cluster Participation Deposit as specified in Section 4.2.3.2.2

#### **Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this form is true and accurate.

For Interconnection Customer: \_\_\_\_\_ Date: \_\_\_\_\_

Attachment B (page 1)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

**The technical data required below must be submitted no later than the date of execution of the Feasibility Study Agreement pursuant to Section 6.1 of the ETU IP. Submit additional data sheets as necessary.**

**ELECTIVE TRANSMISSION UPGRADES:**

<b>GEOGRAPHIC MAP</b>
Geographic map which clearly illustrates the location of the proposed Elective Transmission Upgrade facilities and which includes the location of the proposed Point(s) of Interconnection and a conceptual transmission line or transmission cable route if applicable.
<b>ONE LINE DIAGRAM</b>
Conceptual one-line diagram of the proposed Elective Transmission Upgrades facilities showing the connectivity between all new proposed equipment (i.e., circuit breakers, transformers, shunt-connected capacitor banks, shunt-connected reactors, dynamic reactive power supply systems, transmission lines, etc.) and the proposed bus configuration at the Point(s) of Interconnection.
<b>PROPOSED POINT(S) OF INTERCONNECTION</b> <i>(include additional points as necessary)</i>
Point of Interconnection A:
Voltage Level: _____ kV
Point of Interconnection B:
Voltage Level: _____ kV

Attachment B (page 2)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Point of Interconnection C:
Voltage Level: _____ kV
<b>AC TRANSMISSION LINE DATA</b>  <i>(include data for segments between the POI and converter station(s) as necessary)</i>
Estimated transmission line length: _____ Miles
Conceptual AC transmission tower design illustrating tower type, conductor type, number of conductors per bundle, spacing of conductors within bundle, phase spacing between conductors or conductor bundle spacing, and conductor or conductor bundle clearances.
Voltage level: _____ kV
Transmission line MVA base: _____ MVA
Estimated positive sequence impedances on transmission line MVA base:  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Estimated zero sequence impedances on transmission line MVA base):  R: _____ p.u.      X: _____ p.u.      B: _____ p.u.
Line Rating:  Normal/LTE/STE Rating _____ MVA / _____ MVA / _____ MVA

Attachment B (page 3)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

<b>TRANSFORMER DATA</b>  <i>(include data for converter station power transformer(s) as necessary)</i>
Estimated Transformer Rating: OA/FA/FOA Rating _____ MVA / _____ MVA / _____ MVA
Voltage Ratio: High-side/Low-side/Tertiary _____ kV / _____ kV / _____ kV
Winding Connections (Delta, Wye, or Wye-Grounded): High-side Winding / Low-side Winding / Tertiary Winding _____ / _____ / _____
Fixed or Variable Taps:
Estimated Tap Range:
Estimated Two-Winding Transformer Impedances: Positive Sequence Impedance on transformer OA MVA base: _____ % _____ X/R Zero Sequence Impedance on transformer OA MVA base: _____ % _____ X/R
Estimated Three-Winding Transformer Impedances:
Positive Sequence Impedance on transformer OA MVA base Z1 <sub>H-L</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>H-T</sub> (on self-cooled MVA rating) _____ %, X/R _____ Z1 <sub>L-T</sub> (on self-cooled MVA rating) _____ %, X/R _____

Attachment B (page 4)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection Feasibility Study

Zero Sequence Impedance on transformer OA MVA base $Z_{0_{H-L}}$ (on self-cooled MVA rating) _____ %, X/R _____ $Z_{0_{H-T}}$ (on self-cooled MVA rating) _____ %, X/R _____ $Z_{0_{L-T}}$ (on self-cooled MVA rating) _____ %, X/R _____
<b>FIXED OR SWITCHED SHUNT CAPACITOR BANK DATA</b>
Capacitor Bank Rating: _____ MVar
Estimated positive sequence susceptance on capacitor bank rating base: B: _____ p.u.
Estimated zero sequence susceptance on capacitor bank rating base: B: _____ p.u.
<b>FIXED OR SWITCHED SHUNT REACTOR DATA</b>
Nameplate Reactor Rating: _____ MVar
Estimated positive sequence susceptance on reactor rating base: B: _____ p.u.
Estimated zero sequence susceptance on reactor rating base: B: _____ p.u.
<b>DYNAMIC SHUNT REACTIVE SUPPLY SYSTEM</b>
Device Type (i.e., SVC, STATCOM, etc.):
Reactive power supply reference point:
Maximum leading reactive power supply capability: _____ MVar

Attachment B (page 5)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Maximum lagging reactive power supply capability: _____ MVar
<b>DC TRANSMISSION SYSTEMS (LINE-COMMUTATED CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW    _____ MVA
Minimum power transmission capacity: _____ MW
Maximum power transmission ramp rate: _____ MW/min
Point-to-point or back-to-back transmission:
Monopolar or bipolar transmission configuration:
Unidirectional or bidirectional power transmission: (identify rectifier station for detail to be submitted below):
Rated DC voltage: _____ kV
Rated DC current: _____ A
Power controlling converter station and real power reference location:
Estimated converter station losses (including auxiliary power demand) at nameplate power:  Rectifier: _____ kW  Inverter: _____ kW
Estimated transmission line or cable losses at nameplate power: _____ kW
Nominal rectifier firing angle (alpha): _____ deg

Attachment B (page 6)  
 To Appendix 1  
 Interconnection Request  
 Technical Data Required For  
 Interconnection Feasibility Study

Nominal inverter extinction angle (gamma): _____ deg
Estimated converter station total reactive power supply (including filtering system) at nameplate active power:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVA</span> <span>Inverter: _____ MVA</span> </div>
Estimated number of switched filter or reactive power supply devices:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____</span> <span>Inverter: _____</span> </div>
Estimated size of largest switched filter or reactive power supply device:  <div style="display: flex; justify-content: space-around;"> <span>Rectifier: _____ MVA</span> <span>Inverter: _____ MVA</span> </div>
Conceptual DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.
Conceptual DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.
Estimated pole conductor resistance at maximum operating temperature: _____ ohms
Estimated DMNR conductor resistance at maximum operating temperature : _____ ohms
<b>DC TRANSMISSION SYSTEMS (VOLTAGE SOURCE CONVERTER TECHNOLOGY)</b>
Nameplate power transmission capacity: _____ MW _____ MVA
Point-to-point or back-to-back transmission:



Attachment B (page 7)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Transmission configuration (i.e., mono-pole, bi-pole or other):
Unidirectional or bidirectional power transmission:  (identify rectifier station for detail to be submitted below):
Maximum power transmission ramp rate: _____ MW/min
Rated DC voltage: _____ kV
Rated DC current: _____ A
Real power controlling converter and reference location:
Estimated converter station losses (including auxiliary power demand) at nameplate power:  _____ kW
Estimated transmission line or cable losses at nameplate power: _____ kW
<p>Estimated passive filter size:</p> <p style="margin-left: 40px;">Rectifier:      Fixed: ____ MVar    Switched at de-block: ____ MVar</p> <p style="margin-left: 40px;">Inverter:      Fixed: ____ MVar    Switched at de-block: ____ MVar</p>
<p>Estimated maximum converter station leading reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:</p> <p style="margin-left: 40px;">Rectifier: _____ MVar      Inverter: _____ MVar</p>

Attachment B (page 8)  
To Appendix 1  
Interconnection Request  
Technical Data Required For  
Interconnection Feasibility Study

Estimated maximum converter station lagging reactive power supply (including filtering system) at the network side of the power transformer and at nameplate active power:

Rectifier: \_\_\_\_\_ MVar      Inverter: \_\_\_\_\_ MVar

Provide reactive capability curve.

Conceptual DC transmission tower design illustrating tower type, conductor type, number of conductors, spacing between pole conductors or conductor bundles, and conductor or conductor bundle clearances.

Conceptual DC cable design illustrating cable type, cable spacing, and underground or submarine installation design.

Estimated pole conductor resistance at maximum operating temperature: \_\_\_\_\_ ohms

**POWER SYSTEM SIMULATION MODELS**

Completed, fully-functioning, public (*i.e.*, non-proprietary or non-confidential) Siemens PTI's PSS/E power flow models or other compatible formats, such as IEEE and General Electric Company Power Systems Load Flows ("PSLF") data sheet, must be supplied with this Attachment A. If additional public data sheets are more appropriate to the proposed device, then they shall be provided and discussed at the Scoping Meeting. For all Interconnection Studies commencing after January 1, 2017, all power flow models must be standard library models in PSS/E or applicable applications. After January 1, 2017, user-models will not be accepted.

**OTHER TRANSMISSION FACILITY DATA**

System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study.

**Applicant Signature**

I hereby certify that, to the best of my knowledge, all the information provided in this Attachment B to the Interconnection Request is true and accurate.

For Interconnection Customer:\_\_\_\_\_ Date:\_\_\_\_\_

**APPENDIX 2**  
**INTERCONNECTION FEASIBILITY STUDY AGREEMENT**

THIS AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Elective Transmission Upgrade to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner(s) to perform an Interconnection Feasibility Study to assess the feasibility of interconnecting the proposed Elective Transmission Upgrade to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade

Interconnection Procedures (“ETU IP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).

- 2.0 Interconnection Customer elects and System Operator shall cause to be performed an Interconnection Feasibility Study consistent with Section 6.0 of the ETU IP in accordance with the Tariff.
- 3.0 The scope of the Interconnection Feasibility Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection Feasibility Study shall be based on the technical information provided by Interconnection Customer in Attachment B to the Interconnection Request, as may be modified as the result of the Scoping Meeting. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection Feasibility Study and as designated in accordance with Section 3.3.4 of the ETU IP. If, after the designation of the Point of Interconnection pursuant to Section 3.3.4 of the ETU IP, Interconnection Customer modifies its Interconnection Request pursuant to Section 4.4, the time to complete the Interconnection Feasibility Study may be extended.
- 5.0 The Interconnection Feasibility Study report shall provide the following information depending on whether the Feasibility Study consisted of (a) a power flow, including thermal analysis and voltage analysis, and short circuit analysis, or (b) limited thermal analysis, voltage analysis, short circuit analysis, stability analysis, and electromagnetic analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade’s interconnection given recent study experience and as discussed at the Scoping Meeting:
  - preliminary identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection, or, findings of the limited thermal analysis, voltage analysis, short circuit analysis, stability

analysis, and electromagnetic transient analysis, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade's interconnection given recent study experience and as discussed at the Scoping Meeting;

- preliminary identification of any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection, as appropriate, focusing on the issues that are expected to be the most significant for the proposed Elective Transmission Upgrade's interconnection given recent study experience and as discussed at the Scoping Meeting;
- preliminary description of and a non-binding good faith order of magnitude estimated cost of (unless such cost estimate is waived by the Interconnection Customer) and the time to construct the Interconnection Facilities and Network Upgrades necessary to interconnect the Elective Transmission Upgrade as identified within the scope of the analysis performed as part of the study;
- If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, initial review of grounding requirements and electric system protection;
- If the Feasibility Study consisted of a power flow, including thermal analysis and voltage analysis, and short circuit analysis, preliminary description and non-binding estimated cost of and the time to construct the facilities required to interconnect the Elective Transmission Upgrade to the Administered Transmission System and to address the identified short circuit and power flow issues; and
- to the extent the Interconnection Customer requested a preliminary analysis as described in this Section 6.2 of the ETU IP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

In accordance with the ETU IP, in performing the Interconnection Feasibility Study, System Operator and Interconnecting Transmission Owner shall coordinate with each other and Affected Parties, and shall receive and

incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. The deposit shall be applied toward the cost of the Interconnection Feasibility Study and the development of this Interconnection Feasibility Study Agreement and its attachment(s). Interconnecting Transmission Owner's and System Operator's good faith estimate for the time of completion of the Interconnection Feasibility Study Agreement is [insert date].

The total estimated cost of the performance of the Interconnection Feasibility Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection Feasibility Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Feasibility Study System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection Feasibility Study.

Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

- 7.0 Miscellaneous.

- 7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Feasibility Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Feasibility Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Feasibility Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Feasibility Study, the content of the Interconnection Feasibility Study, or the conclusions of the Interconnection Feasibility Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.



7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or an Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or an Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties

arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Feasibility Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Feasibility Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing

written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.

- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.

- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION FEASIBILITY STUDY**

The Interconnection Feasibility Study will be based upon the information set forth in the Interconnection Request and agreed upon in the Scoping Meeting held on \_\_\_\_\_:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]

**APPENDIX 3**  
**INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer desires to interconnect the Elective Transmission Upgrade to the Administered Transmission System;

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection Feasibility Study (the “Feasibility Study”) and provided the results of said study to the Interconnection Customer, or Interconnection Customer has requested that the Feasibility Study be completed as part of the System Impact Study pursuant to Section 6.1 of the ETU IP, or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”)(This recital is to be omitted if Interconnection Customer has elected to forego the Interconnection Feasibility Study); and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection System Impact Study to assess the impact of interconnecting the Elective Transmission Upgrade to the Administered Transmission System, and any Affected Systems.

**NOW, THEREFORE,** in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade Interconnection Procedure (“ETU IP”).
- 2.0 Interconnection Customer elects and System Operator and Interconnecting Transmission Owner shall cause to be performed an Interconnection System Impact Study consistent with Section 7.0 of the ETU IP in accordance with the Tariff.
- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, whether performed separately or as part of the Interconnection System Impact Study, and the technical information provided by Interconnection Customer in Attachment A to the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the ETU IP. System Operator and Interconnecting Transmission Owner reserve the right to request additional technical information from Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
  - identification of any circuit breaker or other facility short circuit capability limits exceeded as a result of the interconnection;



- identification of any thermal overload of any transmission facility or system voltage limit violations resulting from the interconnection;
- initial review of grounding requirements and electric system protection;
- identification of any instability or inadequately damped response to system disturbances resulting from the interconnection;
- description and non-binding, good faith estimated cost of and the time to construct the facilities required to interconnect the Elective Transmission Upgrade to the Administered Transmission System and to address the identified short circuit, instability, and power flow issues; and
- to the extent the Interconnection Customer requested a preliminary analysis as described in this Section 7.4 of the ETU IP, the report will also provide a list of potential upgrades that may be necessary for the Interconnection Customer's Elective Transmission Upgrade to enable an Import Capacity Resource(s) to qualify for participation in a Forward Capacity Auction under Section III.13 of the Tariff.

6.0 The Interconnection Customer is providing a deposit equal to the greater of 100 percent of the estimated cost of the Interconnection System Impact Study or \$250,000.

The deposit shall be applied toward the cost of the Interconnection System Impact Study and the development of this Interconnection System Impact Study Agreement and its attachment(s) and the ETU IA. Interconnecting Transmission Owner's and System Operator's good faith estimate for the times of commencement and completion of the Interconnection System Impact Study is [insert dates].

The total estimated cost of the performance of the Interconnection System Impact Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection System Impact Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study.

System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection System Impact Study each month.

Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

In accordance with the ETU IP, in performing the Interconnection System Impact Study, System Operator and Interconnecting Transmission Owner shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

#### 7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection System Impact Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the

Interconnection System Impact Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection System Impact Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection System Impact Study, the content of the Interconnection System Impact Study, or the conclusions of the Interconnection System Impact Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not

be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, an Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owners and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or

willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Interconnection System Impact Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection System Impact Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.

- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.

7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



**ASSUMPTIONS USED IN CONDUCTING THE  
INTERCONNECTION SYSTEM IMPACT STUDY**

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, whether performed separately or as part of the Interconnection System Impact Study, subject to any modifications in accordance with Section 4.4 of the ETU IP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied.

Designation of alternative Point(s) of Interconnection and configuration.

[Above assumptions to be completed by Interconnection Customer and other assumptions to be provided by Interconnection Customer, System Operator, and Interconnecting Transmission Owner]

**APPENDIX 4**  
**INTERCONNECTION FACILITIES STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_ ; and

**WHEREAS**, Interconnection Customer desires to interconnect the Elective Transmission Upgrade to the Administered Transmission System; and

**WHEREAS**, System Operator and Interconnecting Transmission Owner have completed an Interconnection System Impact Study (the “System Impact Study”) and provided the results of said study to the Interconnection Customer; and

**WHEREAS**, Interconnection Customer has requested System Operator and Interconnecting Transmission Owner to perform an Interconnection Facilities Study to specify and estimate the cost of the equipment, engineering, procurement and construction work needed to implement the conclusions of the Interconnection System Impact Study in accordance with Good Utility Practice to physically and electrically connect the Elective Transmission Upgrade to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agreed as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade Interconnection Procedures (“ETU IP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 Interconnection Customer elects and System Operator shall cause an Interconnection Facilities Study consistent with Section 8.0 of the ETU IP to be performed in accordance with the Tariff.
- 3.0 The scope of the Interconnection Facilities Study shall be subject to the assumptions set forth in Attachment A and the data provided in Attachment B to this Agreement.
- 4.0 The Interconnection Facilities Study report (i) shall provide a description, estimated cost of (consistent with Attachment A), and schedule for required facilities to interconnect the Elective Transmission Upgrade to the Administered Transmission System and (ii) shall address the short circuit, instability, and power flow issues identified in the Interconnection System Impact Study.
- 5.0 The Interconnection Customer is providing a deposit equal to the greater of 25 percent of the estimated cost of the Interconnection Facilities Study or \$250,000.

The deposit shall be applied toward the cost of the Interconnection Facilities Study and the development of this Interconnection Facilities Study Agreement and its attachment(s) and the ETU IA. The time for completion of the Interconnection Facilities Study is specified in Attachment A.

The total estimated cost of the performance of the Interconnection Facilities Study consists of \$\_\_\_\_\_ which is comprised of the System Operator’s estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner’s estimated cost of \$\_\_\_\_\_.

Any difference between the deposit and the actual cost of the Interconnection Facilities Study shall be paid by or refunded to the Interconnection Customer, as appropriate.

Upon receipt of the Interconnection Facilities Study, System Operator and Interconnecting Transmission Owner shall charge and Interconnection Customer shall pay the actual costs of the Interconnection Facilities Study. System Operator and Interconnecting Transmission Owner may, in the exercise of reasonable discretion, invoice the Interconnection Customer on a monthly basis for the work to be conducted on the Interconnection Facilities Study each month. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of the invoice.

In accordance with the ETU IP, in performing the Interconnection Facilities Study, Interconnecting Transmission Owner and System Operator shall coordinate with Affected Parties, shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.

6.0 Miscellaneous.

6.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

6.2 Disclaimer of Warranty. In preparing and/or participating in the Interconnection Facilities Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Interconnection Facilities Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Interconnection Facilities Study), as applicable, no Party nor any subcontractor consultant

employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the information considered in conducting the Interconnection Facilities Study, the content of the Interconnection Facilities Study, or the conclusions of the Interconnection Facilities Study.

Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 6.3 Force Majeure, Liability and Indemnification.

6.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

6.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or

omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 6.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owner under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from the gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by

Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owner shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 6.4 Third-Party Beneficiaries. Without limiting Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, review, or to assist in the conducting, participating in, or reviewing of, an Interconnection Facilities Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 6.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Interconnection Facilities Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 6.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located without regard to any choice of laws provisions.
- 6.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed

severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.

- 6.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.
- 6.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 6.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 6.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 6.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instance; rather, the same shall be and remain in full force and effect.
- 6.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 6.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations



hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment A  
To Appendix 4  
Interconnection Facilities  
Study Agreement

**INTERCONNECTION CUSTOMER SCHEDULE ELECTION FOR CONDUCTING THE  
INTERCONNECTION FACILITIES STUDY**

Interconnection Customer elects (check one):

- b. +/- 20 percent cost estimate contained in the Interconnection Facilities Study report.
- c. +/- 10 percent cost estimate contained in the Interconnection Facilities Study report.

Interconnecting Transmission Owner and System Operator shall use Reasonable Efforts to complete the study and issue a draft Interconnection Facilities Study report to the Interconnection Customer within the following number of days after of receipt of an executed copy of this Interconnection Facilities Study Agreement:

- ninety (90) Calendar Days with no more than a +/- 20 percent cost estimate contained in the report, or
- one hundred eighty (180) Calendar Days with no more than a +/- 10 percent cost estimate contained in the report.

**DATA FORM TO BE PROVIDED BY INTERCONNECTION CUSTOMER  
WITH THE  
INTERCONNECTION FACILITIES STUDY AGREEMENT**

Provide location plan and simplified one-line diagram of the Elective Transmission Upgrade, including terminal facilities. For staged projects, please indicate future equipment, etc.

One set of metering is required for each ETU connection to the new ring bus or existing New England Transmission System station. Number of connections:

On the one line indicate the required capacity attached at each metering location. (Maximum load on Current Transformer/Power Transformer (“CT/PT”))

On the one line indicate the location of auxiliary power. (Minimum load on CT/PT) Amps

Will an alternate source of auxiliary power be available during CT/PT maintenance?

Yes \_\_\_\_\_ No \_\_\_\_\_

Will a transfer bus on the ETU side of the metering require that each meter set be designed for the total ETU capacity? Yes \_\_\_\_\_ No \_\_\_\_\_

(Please indicate on one line).

What type of control system or Power Line Carrier (“PLC”) will be located at the Interconnection Customer’s ETU?

What protocol does the control system or PLC use?

Attachment B (page 2)  
Appendix 4  
Interconnection Facilities  
Study Agreement

Please provide a 7.5-minute quadrangle of the site. Sketch the facility, station, transmission line, and property line.

Physical dimensions of the proposed interconnection station:

Bus length from facility to interconnection station:

Line length from interconnection station to Interconnecting Transmission Owner's transmission line.

Tower number observed in the field. (Painted on tower leg)\*

Number of third party easements required for transmission lines\*:

\* To be completed in coordination with System Operator and Interconnecting Transmission Owner.

Is the ETU in Interconnecting Transmission Owner's service area?

Yes \_\_\_\_\_ No \_\_\_\_\_ Local provider:

Please provide proposed schedule dates:

Begin Construction Date:

Trial Operation Date:

Commercial Operation Date:



**APPENDIX 5**  
**OPTIONAL INTERCONNECTION STUDY AGREEMENT**

**THIS AGREEMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnection Customer,”) and ISO New England Inc., a non-stock corporation existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”) [and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State of \_\_\_\_\_ (“Interconnecting Transmission Owner”)]. Interconnection Customer, System Operator, and Interconnecting Transmission Owner may be referred to as a “Party,” or collectively as the “Parties.”

**RECITALS**

**WHEREAS**, Interconnection Customer is proposing an Elective Transmission Upgrade consistent with the Interconnection Request submitted by the Interconnection Customer dated \_\_\_\_\_; and

**WHEREAS**, Interconnection Customer is proposing to establish an interconnection to the Administered Transmission System; and

**WHEREAS**, Interconnection Customer has submitted to System Operator an Interconnection Request; and

**WHEREAS**, on or after the date when the Interconnection Customer receives the Interconnection System Impact Study results, Interconnection Customer has further requested that the System Operator and Interconnecting Transmission Owner prepare an Optional Interconnection Study.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the Commission-approved Elective Transmission Upgrade Interconnection Procedures (“ETU IP”), or in the other provisions of the ISO New England Inc. Transmission, Markets and Services Tariff (the “Tariff”).
- 2.0 Interconnection Customer elects and System Operator shall cause an Optional Interconnection Study consistent with Section 10.0 of the ETU IP to be performed in accordance with the Tariff.
- 3.0 The scope of the Optional Interconnection Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Optional Interconnection Study shall be performed solely for informational purposes.
- 5.0 The Optional Interconnection Study report shall provide a sensitivity analysis based on the assumptions specified by the Interconnection Customer in Attachment A to this Agreement. The Optional Interconnection Study will identify Interconnecting Transmission Owner’s Interconnection Facilities and the Network Upgrades, and the estimated cost thereof, that may be required to provide transmission service or Interconnection Service based upon the assumptions specified by the Interconnection Customer in Attachment A.  
In accordance with the ETU IP, in performing the Optional Interconnection Study, the System Operator shall coordinate with Interconnecting Transmission Owner and Affected Parties, and shall receive and incorporate input from such entities into its study, and shall provide copies of the final study report to such entities.
- 6.0 The Interconnection Customer is providing a deposit equal to 100 percent of the estimated cost of the study. Interconnecting Transmission Owner’s and System Operator’s good faith estimate for the time of completion of the Optional Interconnection Study is [insert date].



The total estimated cost of the performance of the Optional Interconnection Study consists of \$\_\_\_\_\_ which is comprised of the System Operator's estimated cost of \$\_\_\_\_\_ and the Interconnecting Transmission Owner's estimated cost of \$\_\_\_\_\_.

Any difference between the initial payment and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate. Upon receipt of the Optional Interconnection Study, System Operator and Interconnecting Transmission Owner shall charge and the Interconnection Customer shall pay the actual costs of the Optional Interconnection Study. Interconnection Customer shall pay any invoiced amounts within thirty (30) Calendar Days of receipt of invoice.

7.0 Miscellaneous.

7.1 Accuracy of Information. Except as a Party ("Providing Party") may otherwise specify in writing when it provides information to the other Parties under this Agreement, the Providing Party represents and warrants that, to the best of its knowledge, the information it provides to the other Parties shall be accurate and complete as of the date the information is provided. The Providing Party shall promptly provide the other Parties with any additional information needed to update information previously provided.

7.2 Disclaimer of Warranty. In preparing and/or participating in the Optional Interconnection Study, as applicable, each Party and any subcontractor consultants employed by it shall have to rely on information provided by the Providing Party, and possibly by third parties, and may not have control over the accuracy of such information. Accordingly, beyond the commitment to use Reasonable Efforts in preparing and/or participating in the Optional Interconnection Study (including, but not limited to, exercise of Good Utility Practice in verifying the accuracy of information provided for or used in the Optional Interconnection Study), as applicable, no Party nor any subcontractor consultant employed by it makes any warranties, express or implied, whether arising by operation of law, course of performance or dealing, custom, usage in the trade or profession, or otherwise, including without limitation implied warranties of merchantability and fitness for a particular purpose, with regard to the accuracy of the

information considered in conducting the Optional Interconnection Study, the content of the Optional Interconnection Study, or the conclusions of the Optional Interconnection Study. Interconnection Customer acknowledges that it has not relied on any representations or warranties not specifically set forth herein and that no such representations or warranties have formed the basis of its bargain hereunder.

### 7.3 Force Majeure, Liability and Indemnification.

7.3.1 Force Majeure. Neither System Operator, Interconnecting Transmission Owner nor an Interconnection Customer will be considered in default as to any obligation under this Agreement if prevented from fulfilling the obligation due to an event of Force Majeure; provided that no event of Force Majeure affecting any entity shall excuse that entity from making any payment that it is obligated to make hereunder. However, an entity whose performance under this Agreement is hindered by an event of Force Majeure shall make all reasonable efforts to perform its obligations under this Agreement, and shall promptly notify the System Operator, the Interconnecting Transmission Owner or the Interconnection Customer, whichever is appropriate, of the commencement and end of each event of Force Majeure.

7.3.2 Liability. System Operator shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by System Operator in performing its obligations under this Agreement, except to the extent such act or omission by System Operator is found to result from its gross negligence or willful misconduct. Interconnecting Transmission Owner shall not be liable for money damages or other compensation to the Interconnection Customer for action or omissions by Interconnecting Transmission Owner in performing its obligations under this Agreement, except to the extent such act or omission by Interconnecting Transmission Owner is found to result from its gross negligence or willful misconduct. To the extent the Interconnection Customer has claims against System Operator or Interconnecting Transmission Owner, the Interconnection Customer may only look to the assets of System

Operator or Interconnecting Transmission Owner (as the case may be) for the enforcement of such claims and may not seek to enforce any claims against the directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either who, the Interconnection Customer acknowledges and agrees, have no personal or other liability for obligations of System Operator or Interconnecting Transmission Owner by reason of their status as directors, members, shareholders, officers, employees or agents of System Operator or Interconnecting Transmission Owner or Affiliate of either. In no event shall System Operator, Interconnecting Transmission Owner or any Interconnection Customer be liable for any incidental, consequential, multiple or punitive damages, loss of revenues or profits, attorneys fees or costs arising out of, or connected in any way with the performance or non-performance under this Agreement. Notwithstanding the foregoing, nothing in this section shall diminish an Interconnection Customer's obligations under the Indemnification section below.

- 7.3.3 Indemnification. Interconnection Customer shall at all times indemnify, defend, and save harmless System Operator and the Interconnecting Transmission Owner and their respective directors, officers, members, employees and agents from any and all damages, losses, claims and liabilities ("Losses") by or to third parties arising out of or resulting from the performance by System Operator or Interconnecting Transmission Owners under this Agreement, any bankruptcy filings made by the Interconnection Customer, or the actions or omissions of the Interconnection Customer in connection with this Agreement, except in the case of System Operator, to the extent such Losses arise from gross negligence or willful misconduct by System Operator or its directors, officers, members, employees or agents, and, in the case of Interconnecting Transmission Owner, to the extent such Losses arise from the gross negligence or willful misconduct by Interconnecting Transmission Owner or its directors, officers, members, employees or agents. The amount of any indemnity payment hereunder shall be reduced (including, without limitation, retroactively) by any insurance proceeds or other amounts actually recovered by the indemnified party in respect of the

indemnified action, claim, demand, cost, damage or liability. The obligations of Interconnection Customer to indemnify System Operator and Interconnecting Transmission Owners shall be several, and not joint or joint and several. The liability provisions of the Transmission Operating Agreement or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner.

- 7.4 Third-Party Beneficiaries. Without limitation of Sections 7.2 and 7.3 of this Agreement, the Parties agree that subcontractor consultants hired by them to conduct, participate in, or review, or to assist in the conducting, participating in, or reviewing of, an Optional Interconnection Study shall be deemed third party beneficiaries of Sections 7.2 and 7.3.
- 7.5 Term and Termination. This Agreement shall be effective from the date hereof and unless earlier terminated in accordance with this Section 7.5, shall continue in effect for a term of one year or until the Optional Interconnection Study is completed. This Agreement shall automatically terminate upon the withdrawal of Interconnection Request under Section 3.6 of the ETU IP. The System Operator or the Interconnecting Transmission Owner may terminate this Agreement fifteen (15) days after providing written notice to the Interconnection Customer that it has breached one of its obligations hereunder, if the breach has not been cured within such fifteen (15) day period.
- 7.6 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the state where the Point of Interconnection is located, without regard to any choice of laws provisions.
- 7.7 Severability. In the event that any part of this Agreement is deemed as a matter of law to be unenforceable or null and void, such unenforceable or void part shall be deemed severable from this Agreement and the Agreement shall continue in full force and effect as if each part was not contained herein.
- 7.8 Counterparts. This Agreement may be executed in counterparts, and each counterpart shall have the same force and effect as the original instrument.

- 7.9 Amendment. No amendment, modification or waiver of any term hereof shall be effective unless set forth in writing and signed by the Parties hereto.
- 7.10 Survival. All warranties, limitations of liability and confidentiality provisions provided herein shall survive the expiration or termination hereof.
- 7.11 Independent Contractor. Each of the Parties shall at all times be deemed to be an independent contractor of the other Parties, and none of its employees or the employees of its subcontractors shall be considered to be employees of the other Parties as a result of this Agreement.
- 7.12 No Implied Waivers. The failure of a Party to insist upon or enforce strict performance of any of the provisions of this Agreement shall not be construed as a waiver or relinquishment to any extent of such Party's right to insist or rely on any such provision, rights and remedies in that or any other instances; rather, the same shall be and remain in full force and effect.
- 7.13 Successors and Assigns. This Agreement may not be assigned, by operation of law or otherwise, without the prior written consent of the other Parties hereto, such consent not to be unreasonably withheld. Notwithstanding the foregoing, this Agreement, and each and every term and condition hereof, shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, to the extent the same are authorized hereunder.
- 7.14 Due Authorization. Each Party to this Agreement represents and warrants that it has full power and authority to enter into this Agreement and to perform its obligations hereunder, that execution of this Agreement will not violate any other agreement with a third party, and that the person signing this Agreement on its behalf has been properly authorized and empowered to enter into this Agreement.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

[System Operator]

[Insert name of Interconnection Customer]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Interconnecting Transmission Owner

[Insert name of ITO]

[Insert name of ITO]

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Attachment A

Appendix 5

Optional Interconnection

Study Agreement

**ASSUMPTIONS USED IN CONDUCTING  
THE OPTIONAL INTERCONNECTION STUDY**

[To be completed by Interconnection Customer consistent with Section 10 of the ETU IP.]

**APPENDIX 6**  
**ELECTIVE TRANSMISSION UPGRADE**  
**INTERCONNECTION AGREEMENT**

**TABLE OF CONTENTS**

Article 1	Definitions
Article 2	Effective Date, Term and Termination
Article 3	Regulatory Filings
Article 4	Scope of Service
Article 5	Interconnection Facilities Engineering, Procurement, and Construction
Article 6	Testing and Inspection
Article 7	Metering
Article 8	Communications
Article 9	Operations
Article 10	Maintenance
Article 11	Performance Obligation
Article 12	Invoice
Article 13	Emergencies
Article 14	Regulatory Requirements and Governing Law
Article 15	Notices
Article 16	Force Majeure
Article 17	Default
Article 18	Indemnity, Consequential Damages and Insurance
Article 19	Assignment
Article 20	Severability
Article 21	Comparability
Article 22	Confidentiality
Article 23	Environmental Releases
Article 24	Information Requirements
Article 25	Information Access and Audit Rights
Article 26	Subcontractors



Article 27	Disputes
Article 28	Representations, Warranties and Covenants
Article 29	Omitted
Article 30	Miscellaneous

## **THIS ELECTIVE TRANSMISSION UPGRADE INTERCONNECTION AGREEMENT**

(“Agreement”) is made and entered into this \_\_\_\_ day of \_\_\_\_\_ 20\_\_, by and between \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Interconnection Customer” with an Elective Transmission Upgrade Facility), ISO New England Inc., a non-stock corporation organized and existing under the laws of the State of Delaware (“System Operator”), and \_\_\_\_\_, a \_\_\_\_\_ organized and existing under the laws of the State/Commonwealth of \_\_\_\_\_ (“Interconnecting Transmission Owner”). Under this Agreement the Interconnection Customer, System Operator, and Interconnecting Transmission Owner each may be referred to as a “Party” or collectively as the “Parties.”

### **RECITALS**

**WHEREAS**, System Operator is the central dispatching agency provided for under the Transmission Operating Agreement (“TOA”) which has responsibility for the operation of the New England Control Area from the System Operator control center and the administration of the Tariff; and

**WHEREAS**, Interconnecting Transmission Owner is the owner or possessor of an interest in the Administered Transmission System; and

**WHEREAS**, Interconnection Customer intends to own, lease and/or control and operate the Elective Transmission Upgrade identified in Appendix C to this Agreement; and

**WHEREAS**, System Operator, Interconnection Customer and Interconnecting Transmission Owner have agreed to enter into this Agreement for the purpose of interconnecting the Elective Transmission Upgrade to the Administered Transmission System.

**NOW, THEREFORE**, in consideration of and subject to the mutual covenants contained herein, it is agreed:

When used in this Elective Transmission Upgrade Interconnection Agreement, terms with initial capitalization that are not defined in Article 1 shall have the meanings specified in the Article in which they are used.

## **ARTICLE 1. DEFINITIONS**

The definitions contained in this Article 1 and those definitions embedded in an Article of this Agreement are intended to apply in the context of the Elective Transmission Upgrade interconnection process provided for in Schedule 25 (and its appendices). To the extent that the definitions herein are different than those contained in Section I.2.2 of the Tariff, the definitions provided below shall control only for purposes of Elective Transmission Upgrade interconnections under Schedule 25. Capitalized terms in Schedule 25 that are not defined in this Article 1 shall have the meanings specified in Section I.2.2 of the Tariff.

**Administered Transmission System** shall mean the PTF and the Non-PTF.

**Adverse System Impact** shall mean any significant negative effects on the stability, reliability or operating characteristics of the electric system.

**Affected System** shall mean any electric system that is within the Control Area, including, but not limited to, generator owned transmission facilities, or any other electric system that is not within the Control Area that may be affected by the proposed interconnection.

**Affected Party** shall mean the entity that owns, operates or controls an Affected System, or any other entity that otherwise may be a necessary party to the interconnection process.

**Affiliate** shall mean, with respect to a corporation, partnership or other entity, each such other corporation, partnership or other entity that directly or indirectly, through one or more intermediaries, controls, is controlled by, or is under common control with, such corporation, partnership or other entity.

**Applicable Laws and Regulations** shall mean all duly promulgated applicable federal, state and local laws, regulations, rules, ordinances, codes, decrees, judgments, directives, or judicial or administrative orders, permits and other duly authorized actions of any Governmental Authority.

**Applicable Reliability Council** shall mean the reliability council applicable to the New England Control Area.

**Applicable Reliability Standards** shall mean the requirements and guidelines of NERC, the NPCC and the New England Control Area, including publicly available local reliability requirements of Interconnecting Transmission Owners or other Affected Parties.

**Base Case** shall have the meaning specified in Section 2.3.

**Base Case Data** shall mean the Base Case power flow, short circuit, and stability databases used for the Interconnection Studies by the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements.

**Breach** shall mean the failure of a Party to perform or observe any material term or condition of the Elective Transmission Upgrade Interconnection Agreement.

**Breaching Party** shall mean a Party that is in Breach of the Elective Transmission Upgrade Interconnection Agreement.

**Calendar Day** shall mean any day including Saturday, Sunday or a Federal Holiday.

**Capacity Capability Interconnection Standard (“CC Interconnection Standard”)** shall mean the criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Capacity Network Resource Interconnection Service or an Elective Transmission Upgrade seeking Capacity Network Import Interconnection Service, and in a manner that ensures intra-zonal deliverability by avoidance of the redispatch of other Capacity Network Resource or Elective Transmission Upgrades with Capacity Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Capacity Network Import Capability (“CNI Capability”)** shall mean the MW quantity associated with CNI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Capacity Network Import Interconnection Service (“CNI Interconnection Service”)** shall mean, for an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade with the Administered Transmission System in accordance with the Capacity Capability Interconnection Standard. An Interconnection Customer’s Capacity Network Import Interconnection Service shall be for the megawatt of Capacity Network Import Capability. Capacity Network Import Interconnection Service does not in and of itself convey transmission service.

**Capacity Network Resource Group Study (“CNR Group Study”)** shall mean the study performed by the System Operator under Section III.13.1.1.2.3 of the Tariff to determine which resources qualify to participate in a Forward Capacity Auction.

**Cluster Enabling Transmission Upgrade (“CETU”)** shall mean new significant transmission line infrastructure that consists of AC transmission lines and related terminal equipment having a nominal voltage rating at or above 115 kV or HVDC transmission lines and HVDC terminal equipment that is identified through the Clustering Enabling Transmission Upgrade Regional Planning Study conducted to accommodate the Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered. The CETU shall be considered part of an ETU Interconnection Related Upgrade and be categorized as Interconnection Facilities or Network Upgrades.

**Cluster Enabling Transmission Upgrade Regional Planning Study (“CRPS”)** shall mean a study conducted by the System Operator under Attachment K, Section II of the Tariff to identify the Cluster Enabling Transmission Upgrade and associated system upgrades to enable the interconnection of Interconnection Requests for which the conditions identified in Section 4.2.1 have been triggered.

**Cluster Interconnection Facilities Study (“CFAC”)** shall mean an Interconnection Facilities Study performed using Clustering pursuant to Section 4.2.4.

**Cluster Interconnection System Impact Study (“CSIS”)** shall mean an Interconnection System Impact Study performed using Clustering pursuant to Section 4.2.3.

**Cluster Participation Deposit** shall mean the initial and additional deposit due under Sections 4.2.3.2.2 and 4.2.4.4.

**Cluster Entry Deadline** shall mean the deadline specified in Section 4.2.3.1.

**Clustering** shall mean the process whereby a group of Interconnection Requests is studied together for the purpose of conducting the Interconnection System Impact Study and Interconnection Facilities Study and for the purpose of determining cost responsibility for upgrades identified through the Clustering provisions.

**Commercial Operation** shall mean the status of an Elective Transmission Upgrade that has commenced transmitting electricity, excluding performance during Trial Operation.

**Commercial Operation Date** shall mean the date on which the Elective Transmission Upgrade commences Commercial Operation as agreed to by the Parties pursuant to Appendix E to the Elective Transmission Upgrade Interconnection Agreement.

**Confidential Information** shall mean any confidential, proprietary or trade secret information of a plan, specification, pattern, procedure, design, device, list, concept, policy or compilation relating to the present or planned business of a Party, which is designated as confidential by the Party supplying the information, whether conveyed orally, electronically, in writing, through inspection, or otherwise. Confidential Information shall include, but not be limited to, information that is confidential pursuant to the ISO New England Information Policy.

**Default** shall mean the failure of a Breaching Party to cure its Breach in accordance with Article 17 of the Elective Transmission Upgrade Interconnection Agreement.

**Dispute Resolution** shall mean the procedure for resolution of a dispute between the Parties in which they will first attempt to resolve the dispute on an informal basis.

**Distribution System** shall mean the Interconnecting Transmission Owner's facilities and equipment used to transmit electricity to ultimate usage points such as homes and industries directly from nearby generators or from interchanges with higher voltage transmission networks which transport bulk power over longer distances. The voltage levels at which distribution systems operate differ among areas.

**Distribution Upgrades** shall mean the additions, modifications, and upgrades to the Interconnecting Transmission Owner's Distribution System at or beyond the Point of Interconnection to facilitate interconnection of the Elective Transmission Upgrade. Distribution Upgrades do not include Interconnection Facilities.

**Effective Date** shall mean the date on which the Elective Transmission Upgrade Interconnection Agreement becomes effective upon execution by the Parties subject to acceptance by the Commission or if filed unexecuted, upon the date specified by the Commission.

**Elective Transmission Upgrade ("ETU")** shall mean a new Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnecting to the Administered Transmission System, or an upgrade to an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is part of or interconnected to the Administered Transmission System for which the Interconnection Customer has agreed to pay all of the costs of said Elective Transmission Upgrade and of any additions or modifications to the Administered Transmission System that are required to accommodate the Elective Transmission Upgrade. An Elective Transmission Upgrade is not a Generator Interconnection Related Upgrade, a Regional Transmission Upgrade, or a Market Efficiency Transmission Upgrade.

**Elective Transmission Upgrade Interconnection Agreement ("ETU IA")** shall mean the form of interconnection agreement applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade, that is included in this Schedule 25 to Section II of the Tariff.

**Elective Transmission Upgrade Interconnection Procedures ("ETU IP")** shall mean the interconnection procedures applicable to an Interconnection Request pertaining to an Elective Transmission Upgrade that are included in this Schedule 25 to Section II of the Tariff.

**Emergency Condition** shall mean a condition or situation: (1) that in the judgment of the Party making the claim is likely to endanger life or property; or (2) that, in the case of the Interconnecting Transmission Owner, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or any Affected System to which the New England Transmission System is directly connected; or (3) that, in the case of Interconnection Customer, is likely (as determined in a non-discriminatory manner) to cause a material adverse effect on the security of, or damage to, the Elective Transmission Upgrade or Interconnection Customer's Interconnection Facilities.

**Engineering & Procurement ("E&P") Agreement** shall mean an agreement that authorizes the Interconnection Customer, Interconnecting Transmission Owner and any other Affected Party to begin engineering and procurement of long lead-time items necessary for the establishment of the interconnection in order to advance the implementation of the Interconnection Request.

**Environmental Law** shall mean Applicable Laws or Regulations relating to pollution or protection of the environment or natural resources.

**External Elective Transmission Upgrade ("External ETU")** shall mean an Elective Transmission Upgrade that interconnects the New England Control Area with another Control Area.

**Federal Power Act** shall mean the Federal Power Act, as amended, 16 U.S.C. §§ 791a et seq.

**Force Majeure** shall mean any act of God, labor disturbance, act of the public enemy, war, insurrection, riot, fire, storm or flood, explosion, breakage or accident to machinery or equipment, any order, regulation or restriction imposed by governmental, military or lawfully established civilian authorities, or any other cause beyond a Party's control. A Force Majeure event does not include acts of negligence or intentional wrongdoing by the Party claiming Force Majeure.

**Generating Facility** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of Section II to the Tariff.



**Governmental Authority** shall mean any federal, state, local or other governmental regulatory or administrative agency, court, commission, department, board, or other governmental subdivision, legislature, rulemaking board, tribunal, or other governmental authority having jurisdiction over the Parties, their respective facilities, or the respective services they provide, and exercising or entitled to exercise any administrative, executive, police, or taxing authority or power; provided, however, that such term does not include the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affiliate thereof.

**Hazardous Substances** shall mean any chemicals, materials or substances defined as or included in the definition of “hazardous substances,” “hazardous wastes,” “hazardous materials,” “hazardous constituents,” “restricted hazardous materials,” “extremely hazardous substances,” “toxic substances,” “radioactive substances,” “contaminants,” “pollutants,” “toxic pollutants” or words of similar meaning and regulatory effect under any applicable Environmental Law, or any other chemical, material or substance, exposure to which is prohibited, limited or regulated by any applicable Environmental Law.

**In-Service Date** shall mean the date upon which the Interconnection Customer reasonably expects it will be ready to begin use of the Interconnecting Transmission Owner’s Interconnection Facilities.

**Interconnecting Transmission Owner** shall mean Transmission Owner that owns, leases or otherwise possesses an interest in the portion of the Administered Transmission System at the Point of Interconnection and shall be a Party to the Elective Transmission Upgrade Interconnection Agreement. The term Interconnecting Transmission Owner shall not be read to include the System Operator, and may refer to one or more Transmission Owners in the case of an Internal Elective Transmission Upgrade.

**Interconnecting Transmission Owner’s Interconnection Facilities** shall mean all facilities and equipment owned, controlled, or operated by the Interconnecting Transmission Owner from the Point of Change of Ownership to the Point of Interconnection as identified in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, including any modifications, additions or upgrades to such facilities and equipment. Interconnecting Transmission Owner’s Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Customer** shall mean any entity, including a transmission owner or its Affiliates or subsidiaries, that interconnects or proposes to interconnect its Elective Transmission Upgrade with the Administered Transmission System under the Elective Transmission Upgrade Interconnection Procedures.

**Interconnection Customer's Interconnection Facilities** shall mean all facilities and equipment, as identified in Appendix A of the Elective Transmission Upgrade Interconnection Agreement, that are separate and distinct from the Elective Transmission Upgrade and are located between the Elective Transmission Upgrade and the Point of Change of Ownership, including any modification, addition, or upgrades to such facilities and equipment necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Customer's Interconnection Facilities are sole use facilities.

**Interconnection Facilities** shall mean the Interconnecting Transmission Owner's Interconnection Facilities and the Interconnection Customer's Interconnection Facilities. Collectively, Interconnection Facilities include all facilities and equipment between the Elective Transmission Upgrade and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Elective Transmission Upgrade to the Administered Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades.

**Interconnection Facilities Study** shall mean a study conducted by the System Operator, Interconnecting Transmission Owner, or a third party consultant for the Interconnection Customer to determine a list of facilities (including Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as identified in the Interconnection System Impact Study), the cost of those facilities, and the time required to interconnect the Elective Transmission Upgrade with the Administered Transmission System. The scope of the study is defined in Section 8 of the Elective Transmission Upgrade Interconnection Procedures.

**Interconnection Facilities Study Agreement** shall mean the form of agreement contained in Appendix 4 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Facilities Study.

**Interconnection Feasibility Study** shall mean a preliminary evaluation of the system impact and cost of interconnecting the Elective Transmission Upgrade to the Administered Transmission System, the scope of which is described in Section 6 of the Elective Transmission Upgrade Interconnection Procedures. The Interconnection Customer has the option to request either that the Interconnection Feasibility Study be completed as a separate and distinct study, or as part of the Interconnection System Impact Study. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection Feasibility Study Agreement** shall mean the form of agreement contained in Appendix 2 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection Feasibility Study.

**Interconnection Request** shall mean an Interconnection Customer's request, in the form of Appendix 1 to the Elective Transmission Upgrade Interconnection Procedures, in accordance with the Tariff, to: (i) interconnect a new Elective Transmission Upgrade to the Administered Transmission System; (ii) make a Material Modification to an Elective Transmission upgrade with an outstanding Interconnection Request; (iii) increase the capability of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected to the Administered Transmission System; (iv) make a Material Modification to the design or operating characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility or Other Transmission Facility that is interconnected with the Administered Transmission System ; or (v) change from NI Interconnection Service to CNI Interconnection Service for an Elective Transmission Upgrade that is eligible to request such services. Interconnection Request shall not include a request to interconnect to a transmission facility that is not part of the Administered Transmission System.

**Interconnection Service** shall mean the right to interconnect the Interconnection Customer's Elective Transmission Upgrade to the Administered Transmission System at the Point of Interconnection pursuant to the terms of the Elective Transmission Upgrade Interconnection Agreement and, if applicable, the Tariff. For an External Elective Transmission Upgrade that is a controllable Merchant Transmission Facility or Other Transmission Facility, Interconnection Service shall include Capacity Network Import Interconnection Service or Network Import Interconnection Service.

**Interconnection Study** shall mean any of the following studies: the Interconnection Feasibility Study, the Interconnection System Impact Study, the Interconnection Facilities Study and the Optional Interconnection Study described in the Elective Transmission Upgrade Interconnection Procedures. Interconnection Study shall not include a CNR Group Study.

**Interconnection Study Agreement** shall mean any of the following agreements: the Interconnection Feasibility Study Agreement, the Interconnection System Impact Study Agreement, the Interconnection Facilities Study Agreement, and the Optional Interconnection Study Agreement attached to Elective Transmission Upgrade Interconnection Procedures.

**Interconnection System Impact Study** shall mean an engineering study that evaluates the impact of the proposed interconnection of an Elective Transmission Upgrade on the safety and reliability of the Administered Transmission System and any other Affected System. The study shall identify and detail the system impacts that would result if the Elective Transmission Upgrade were interconnected without project modifications or system modifications, focusing on Adverse System Impacts, or to study potential impacts, including but not limited to those identified in the Scoping Meeting as described in the Elective Transmission Upgrade Interconnection Procedures. If the Interconnection Customer requests that the Interconnection Feasibility Study be completed as part of the Interconnection System Impact Study, Section 6 shall be performed as the first step of the Interconnection System Impact Study, and shall be regarded as part of the Interconnection System Impact Study. When the requirements of Section 6 are performed as part of the Interconnection System Impact Study, the Interconnection Customer shall be responsible only for the deposit requirements of the Interconnection System Impact Study, and there shall be only one final report, which will include the results of both Section 6 and Section 7.

**Interconnection System Impact Study Agreement** shall mean the form of agreement contained in Appendix 3 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Interconnection System Impact Study.

**Internal Elective Transmission Upgrade (“Internal ETU”)** shall mean an Elective Transmission Upgrade that interconnects solely within the New England Control Area.

**IRS** shall mean the Internal Revenue Service.

**Long Lead Time Facility (“Long Lead Facility”)** shall mean a Generating Facility or an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service, respectively, that has, as applicable, elected or requested long lead time treatment and met the eligibility criteria and requirements specified in Schedule 22 or Schedule 25 of Section II of the Tariff, respectively,

**Loss** shall mean any and all losses relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from another Party’s performance, or non-performance of its obligations under the Elective Transmission Upgrade Interconnection Agreement on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by the Indemnifying Party.

**Major Permits** shall be as defined in Section III.13.1.1.2.2.2(a) of the Tariff.

**Material Modification** shall mean: (i) except as expressly provided in Section 4.4.1, those modifications to the Interconnection Request, including any of the technical data provided by the Interconnection Customer in Appendix 1, Attachment A to the Interconnection Request or to the interconnection configuration, requested by the Interconnection Customer, that either require significant additional study of the same Interconnection Request and could substantially change the interconnection design, or have a material impact (*i.e.*, an evaluation of the proposed modification cannot be completed in less than ten (10) Business Days) on the cost or timing of any Interconnection Studies or upgrades associated with an Interconnection Request with a later queue priority date; (ii) a change to the design or operating

characteristics of an existing Pool Transmission Facility, Merchant Transmission Facility, or Other Transmission Facility that is interconnected with the Administered Transmission System that may have a significant adverse effect on the reliability or operating characteristics of the New England Transmission System; (iii) a delay to the Commercial Operation Date, In-Service Date, or Trial Operation Date of greater than three (3) years where the reason for delay is unrelated to construction schedules or permitting which delay is beyond the Interconnection Customer's control; (iv) except as provided in Section 3.2.3.4, a withdrawal of a request for Long Lead Facility treatment; or (v) except as provided in Section 3.2.3.6, an election to participate in an earlier Forward Capacity Auction than originally anticipated.

**Metering Equipment** shall mean all metering equipment installed or to be installed pursuant to the Elective Transmission Upgrade Interconnection Agreement, including but not limited to instrument transformers, MWh-meters, data acquisition equipment, transducers, remote terminal unit, communications equipment, phone lines, and fiber optics.

**Network Capability Interconnection Standard ("NC Interconnection Standard")** shall mean the minimum criteria required to permit the Interconnection Customer to interconnect a Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service in a manner that avoids any significant adverse effect on the reliability, stability, and operability of the New England Transmission System, including protecting against the degradation of transfer capability for interfaces affected by the Generating Facility seeking Network Resource Interconnection Service or Elective Transmission Upgrade seeking Network Import Interconnection Service, as detailed in the ISO New England Planning Procedures.

**Network Import Capability ("NI Capability")** shall mean the MW quantity associated with NI Interconnection Service, calculated as described in Section II.48 of the Tariff.

**Network Import Interconnection Service ("NI Interconnection Service")** shall mean the Interconnection Service selected by the Interconnection Customer to interconnect its Elective Transmission Upgrade to the Administered Transmission System in accordance with the Network Capability Interconnection Standard. An Interconnection Customer's Network Import Interconnection Service shall be solely for the megawatt amount of the Network Import Capability. Network Import Interconnection Service in and of itself does not convey transmission service.

**Network Upgrades** shall mean the additions, modifications, and upgrades to the New England Transmission System required at or beyond the Point of Interconnection to accommodate the interconnection of the Elective Transmission Upgrade to the Administered Transmission System.

**Notice of Dispute** shall mean a written notice of a dispute or claim that arises out of or in connection with the Elective Transmission Upgrade Interconnection Agreement or its performance.

**Optional Interconnection Study** shall mean a sensitivity analysis based on assumptions specified by the Interconnection Customer in the Optional Interconnection Study Agreement.

**Optional Interconnection Study Agreement** shall mean the form of agreement contained in Appendix 5 of the Elective Transmission Upgrade Interconnection Procedures for conducting the Optional Interconnection Study.

**Party** shall mean the System Operator, Interconnection Customer and Interconnecting Transmission Owner or any combination of the above.

**Point of Change of Ownership** shall mean the point, as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities connect to the Interconnecting Transmission Owner's Interconnection Facilities.

**Point of Interconnection** shall mean the point(s), as set forth in Appendix A to the Elective Transmission Upgrade Interconnection Agreement, where the Interconnection Facilities connect to the Administered Transmission System.

**Queue Position** shall mean the order of a valid request in the New England Control Area, relative to all other pending requests in the New England Control Area, that is established based upon the date and time of receipt of such request by the System Operator. Requests are comprised of interconnection requests for Generating Facilities, Elective Transmission Upgrades, requests for transmission service and notification of requests for interconnection to other electric systems, as notified by the other electric

systems, that impact the Administered Transmission System. References to a “higher-queued” Interconnection Request shall mean one that has been received by System Operator (and placed in queue order) earlier than another Interconnection Request, which is referred to as “lower-queued.”

**Reasonable Efforts** shall mean, with respect to an action required to be attempted or taken by a Party under the Elective Transmission Upgrade Interconnection Agreement, efforts that are timely and consistent with Good Utility Practice and are otherwise substantially equivalent to those a Party would use to protect its own interests.

**Scoping Meeting** shall mean the meeting between representatives of the System Operator, Interconnection Customer, Interconnecting Transmission Owner, or any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, conducted for the purpose of discussing alternative interconnection options, to exchange information including any transmission data and earlier study evaluations that would be reasonably expected to impact such interconnection options, to analyze such information, and to determine the potential feasible Points of Interconnection.

**Site Control** shall mean documentation reasonably demonstrating: (a) that the Interconnection Customer is the owner in fee simple of the real property or holds an easement for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; (b) that the Interconnection Customer holds a valid written leasehold or other contractual interest in the real property for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; (c) that the Interconnection Customer holds a valid written option to purchase or a leasehold interest in the real property for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; (d) that the Interconnection Customer holds a duly executed written contract to purchase, acquire an easement, a license or a leasehold interest in the real property for the Elective Transmission Upgrade’s terminal locations at the Point of Interconnection within the New England Control Area; or (e) that the Interconnection Customer has filed applications for required permits to site on federal or state property where the Elective Transmission Upgrade’s terminal locations will be located at the Point of Interconnection within the New England Control Area.



**Stand Alone Network Upgrades** shall mean Network Upgrades that an Interconnection Customer may construct without affecting day-to-day operations of the New England Transmission System during their construction. The System Operator, Interconnection Customer, Interconnecting Transmission Owner, and any Affected Party as deemed appropriate by the System Operator in accordance with applicable codes of conduct and confidentiality requirements, must agree as to what constitutes Stand Alone Network Upgrades and identify them in Appendix A to the Elective Transmission Upgrade Interconnection Agreement.

**Study Case** shall have the meaning specified in Sections 6.2 and 7.3 of this ETU IP.

**System Protection Facilities** shall mean the equipment, including necessary signal protection communications equipment, required to protect (1) the New England Transmission System from faults or other electrical disturbances occurring at the Elective Transmission Upgrade and (2) the Elective Transmission Upgrade from faults or other electrical system disturbances occurring on the New England Transmission System or on other delivery systems or other generating systems to which the New England Transmission System is directly connected.

**Trial Operation** shall mean the period during which Interconnection Customer is engaged in on-site test operations and commissioning of the Elective Transmission Upgrade prior to Commercial Operation.

**Trial Operation Date** shall mean the date upon which the Elective Transmission Upgrade begins Trial Operation.

## **ARTICLE 2. EFFECTIVE DATE, TERM AND TERMINATION**

**2.1 Effective Date.** This ETU IA shall become effective upon execution by the Parties subject to acceptance by the Commission (if applicable), or if filed unexecuted, upon the date specified by the Commission. System Operator and Interconnecting Transmission Owner, shall promptly and jointly file this ETU IA with the Commission upon execution in accordance with Section 11.3 of the ETU IP and Article 3.1, if required.

**2.2 Term of Agreement.** This ETU IA, subject to the provisions of Article 2.3, and by mutual agreement of the Parties, shall remain in effect for a period of \_\_\_\_\_ years from the Effective Date (*term to be specified in individual Agreement, but in no case should the term be less than ten (10) years from the Effective Date or such other longer period as the Interconnection Customer may request*) and shall be automatically renewed for each successive one-year period thereafter.

**2.3 Termination Procedures.**

**2.3.1 Written Notice.** This ETU IA may be terminated by the Interconnection Customer, subject to continuing obligations of this ETU IA and the Tariff, after giving the System Operator and Interconnecting Transmission Owner ninety (90) Calendar Days advance written notice, or by System Operator or Interconnecting Transmission Owner notifying the Commission after the Elective Transmission Upgrade retires pursuant to the Tariff, provided that if an Interconnection Customer exercises its right to terminate on ninety (90) Calendar Days, any reconnection would be treated as a new interconnection request; or this ETU IA may be terminated by Interconnecting Transmission Owner or System Operator by notifying the Commission after the Elective Transmission Upgrade permanently ceases Commercial Operation.

**2.3.2 Default.** Each Party may terminate this ETU IA in accordance with Article 17. Notwithstanding Articles 2.3.1 and 2.3.2, no termination shall become effective until the Parties have complied with all Applicable Laws and Regulations applicable to such termination, including the filing, if applicable, with the Commission of a notice of termination of this ETU IA, which notice has been accepted for filing by the Commission. Termination of the ETU IA shall not supersede or alter any requirements for deactivation or retirement of an Elective Transmission Upgrade under ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**2.4 Termination Costs.** If a Party elects to terminate this ETU IA pursuant to Article 2.3 above, each Party shall pay all costs incurred (including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment) or charges assessed by the other

Party(ies), as of the date of such Party's(ies') receipt of such notice of termination, that are the responsibility of such Party(ies) under this ETU IA. In the event of termination by a Party, all Parties shall use commercially Reasonable Efforts to mitigate the costs, damages and charges arising as a consequence of termination. Upon termination of this ETU IA, unless otherwise ordered or approved by the Commission:

2.4.1 With respect to any portion of the Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades to the extent covered by this ETU IA, that have not yet been constructed or installed, the Interconnecting Transmission Owner shall to the extent possible and with Interconnection Customer's authorization cancel any pending orders of, or return, any materials or equipment for, or contracts for construction of, such facilities; provided that in the event Interconnection Customer elects not to authorize such cancellation, Interconnection Customer shall assume all payment obligations with respect to such materials, equipment, and contracts, and the Interconnecting Transmission Owner shall deliver such material and equipment, and, if necessary, and to the extent possible, assign such contracts, to Interconnection Customer as soon as practicable, at Interconnection Customer's expense. To the extent that Interconnection Customer has already paid Interconnecting Transmission Owner for any or all such costs of materials or equipment not taken by Interconnection Customer, either (i) in the case of overpayment, Interconnecting Transmission Owner shall promptly refund such amounts to Interconnection Customer, less any costs, including penalties incurred by the Interconnecting Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts, or (ii) in the case of underpayment, Interconnection Customer shall promptly pay such amounts still due plus any costs, including penalties incurred by Interconnecting Transmission Owner to cancel any pending orders of or return such materials, equipment, or contracts.

If an Interconnection Customer terminates this ETU IA, it shall be responsible for all costs incurred in association with that Interconnection Customer's interconnection, including any cancellation costs relating to orders or contracts for Interconnection Facilities and equipment, and other expenses including any Network Upgrades for which the Interconnecting Transmission Owner has incurred expenses and has not been reimbursed by the Interconnection Customer.

- 2.4.2 Interconnecting Transmission Owner may, at its option, retain any portion of such materials, equipment, or facilities that Interconnection Customer chooses not to accept delivery of, in which case Interconnecting Transmission Owner shall be responsible for all costs associated with procuring such materials, equipment, or facilities.
- 2.4.3 With respect to any portion of the Interconnection Facilities, and any other facilities already installed or constructed pursuant to the terms of this ETU IA, Interconnection Customer shall be responsible for all costs associated with the removal, relocation or other disposition or retirement of such materials, equipment, or facilities.
- 2.5 Disconnection.** Upon termination of this ETU IA, Interconnection Service shall terminate and, the Parties will take all appropriate steps to disconnect the Elective Transmission Upgrade from the Interconnecting Transmission Owner's Interconnection Facilities. All costs required to effectuate such disconnection shall be borne by the terminating Party, unless such termination resulted from a non-terminating Party's Default of this ETU IA or such non-terminating Party otherwise is responsible for these costs under this ETU IA.
- 2.6 Survival.** This ETU IA shall continue in effect after termination to the extent necessary to provide for final billings and payments and for costs incurred hereunder, including billings and payments pursuant to this ETU IA; to permit the determination and enforcement of liability and indemnification obligations arising from acts or events that occurred while this ETU IA was in effect; and to permit each Party to have access to the lands of the other Party(ies) pursuant to this ETU IA or other applicable agreements, to disconnect, remove or salvage its own facilities and equipment.

### **ARTICLE 3. REGULATORY FILINGS**

- 3.1 Filing.** The System Operator and Interconnecting Transmission Owner shall jointly file this ETU IA (and any amendment hereto) with the appropriate Governmental Authority, if required, in accordance with Section 11.3 of the ETU IP. Interconnection Customer may request that any information so provided be subject to the confidentiality provisions of Article 22. If the

Interconnection Customer has executed this ETU IA, or any amendment thereto, the Interconnection Customer shall reasonably cooperate with the System Operator and Interconnecting Transmission Owner with respect to such filing and to provide any information reasonably requested by the System Operator and/or the Interconnecting Transmission Owner needed to comply with applicable regulatory requirements.

#### **ARTICLE 4. SCOPE OF SERVICE**

- 4.1 Interconnection Product Options.** Interconnection Customer with an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility (import direction) has selected the following (checked) type(s) of Interconnection Service:

Check: ☐ NI Interconnection Service (NI Capability Only)

☐ CNI Interconnection Service (CNI Capability and NI Capability)

**4.1.1 Capacity Network Import Interconnection Service (CNI Interconnection Service).**

**4.1.1.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and the Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility under the CC Interconnection Standard. CNI Interconnection Service allows the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility to enable the participation of an Import Capacity Resource in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the net CNI Capability, or as otherwise provided in Market Rule 1, Section III of the Tariff.

**4.1.2 Network Import Interconnection Service (NI Interconnection Service).**

**4.1.2.1 The Product.** The System Operator and Interconnecting Transmission Owner must conduct the necessary studies and Interconnecting Transmission Owner and Affected Parties must construct the Network Upgrades needed to interconnect the External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility under the NC Interconnection Standard.

NI Interconnection Service allows the Interconnection Customer's External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility to participate in the New England Markets, in accordance with Market Rule 1, Section III of the Tariff, up to the NI Capability or as otherwise provided in Market Rule 1, Section III of the Tariff. Notwithstanding the above, the portion of an External ETU that is a controllable Merchant Transmission Facility or Other Transmission Facility that has been interconnected under the NC Interconnection Standard cannot be used to support an Import Capacity Resource's(s') participation in the Forward Capacity Market under Section III.13 of the Tariff, except pursuant to a new Interconnection Request for CNI Interconnection Service.

**4.2 Provision of Service.** System Operator and Interconnecting Transmission Owner shall provide Interconnection Service for the Elective Transmission Upgrade at the Point of Interconnection.

**4.3 Performance Standards.** Each Party shall perform all of its obligations under this ETU IA in accordance with Applicable Laws and Regulations, the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Good Utility Practice, and to the extent a Party is required or prevented or limited in taking any action by such requirements and standards, such Party shall not be deemed to be in Breach of this ETU IA for its compliance therewith. If such Party is the Interconnecting Transmission Owner, then that Party shall amend the ETU IA and System Operator, in conjunction with the Interconnecting Transmission Owner, shall submit the amendment to the Commission for approval.

**4.4 No Transmission Delivery Service.** The execution of this ETU IA does not constitute a request for, nor the provision of, any service except for Interconnection Service, including, but not limited to, transmission delivery service, local delivery service, distribution service, capacity

service, energy service, or Ancillary Services under any applicable tariff, and does not convey any right to deliver electricity to any specific customer or Point of Delivery.

**4.5 Transmission Delivery Service Implications.** Interconnection Service allows the Interconnection Customer's Elective Transmission Upgrade to be interconnected to the Administered Transmission System. Although Interconnection Service does not convey a reservation of transmission service, any Network Customer can utilize its network service under the Tariff to obtain delivery of capability from the Interconnection Customer's Elective Transmission Upgrade. An Elective Transmission Upgrade may also be used to provide Ancillary Services, in accordance with the Tariff, after technical studies and/or periodic analyses are performed with respect to the Elective Transmission Upgrade's ability to provide any applicable Ancillary Services, provided that such studies and analyses have been or would be required in connection with the provision of such Ancillary Services by any existing Elective Transmission Upgrade. However, an Interconnection Customer's Elective Transmission Upgrade cannot be required to provide Ancillary Services except to the extent such requirements extend to all Elective Transmission Upgrades that are similarly situated.

Interconnection Service does not necessarily provide the Interconnection Customer with the capability to physically deliver electricity to any particular load on the New England Transmission System without incurring congestion costs. In the event of transmission constraints on the New England Transmission System, the Interconnection Customer's Elective Transmission Upgrade shall be subject to the applicable congestion management procedures for the New England Transmission System.

Once an Interconnection Customer satisfies the requirements for obtaining Interconnection Service, as long as the Elective Transmission Upgrade has not been deemed to be retired, any future transmission service request for delivery of electricity from the Elective Transmission Upgrade to the New England Transmission System of any amount of capacity capability and/or energy capability will not require that any additional studies be performed or that any further upgrades associated with such Elective Transmission Upgrade be undertaken, and regardless of changes in ownership of the Elective Transmission Upgrade. To the extent the Interconnection

Customer enters into an arrangement for long-term transmission service for deliveries from the Elective Transmission Upgrade outside the New England Transmission System, or if the Elective Transmission Upgrade has been deemed to be retired, such request may require additional studies and upgrades in order for Interconnecting Transmission Owner to grant such request.

- 4.6 Interconnection Customer Provided Services.** The services provided by Interconnection Customer under this ETU IA are set forth in Article 9.6 and Article 13.4. Interconnection Customer shall be paid for such services in accordance with Article 11.6.



## **ARTICLE 5. INTERCONNECTION FACILITIES ENGINEERING, PROCUREMENT, AND CONSTRUCTION**

**5.1 Options.** Unless otherwise mutually agreed to between the Parties, Interconnection Customer shall specify the In-Service Date, Trial Operation Date, and Commercial Operation Date as specified in the Interconnection Request or as subsequently revised pursuant to Section 4.4 of the ETU IP; and select either Standard Option or Alternate Option set forth below for completion of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades as set forth in Appendix A, and such dates and selected option shall be set forth in Appendix B (Milestones). In accordance with Section 8 of the ETU IP and unless otherwise mutually agreed, the Alternate Option is not an available option if the Interconnection Customer waived the Interconnection Facilities Study.

**5.1.1 Standard Option.** The Interconnecting Transmission Owner shall design, procure, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, using Reasonable Efforts to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the dates set forth in Appendix B (Milestones). The Interconnecting Transmission Owner shall not be required to undertake any action which is inconsistent with its standard safety practices, its material and equipment specifications, its design criteria and construction procedures, its labor agreements, and Applicable Laws and Regulations. In the event the Interconnecting Transmission Owner reasonably expects that it will not be able to complete the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades by the specified dates, the Interconnecting Transmission Owner shall promptly provide written notice to the Interconnection Customer and shall undertake Reasonable Efforts to meet the earliest dates thereafter.

**5.1.2 Alternate Option.** If the dates designated by Interconnection Customer are acceptable to Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall so notify Interconnection Customer within thirty (30) Calendar Days, and shall assume responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities by the designated dates.

If Interconnecting Transmission Owner subsequently fails to complete Interconnecting Transmission Owner's Interconnection Facilities by the In-Service Date, to the extent necessary to provide back feed power; or fails to complete Network Upgrades by the Trial Operation Date to the extent necessary to allow for Trial Operation at full power output, unless other arrangements are made by the Parties for such Trial Operation; or fails to complete the Network Upgrades by the Commercial Operation Date, as such dates are reflected in Appendix B (Milestones); Interconnecting Transmission Owner shall pay Interconnection Customer liquidated damages in accordance with Article 5.3, Liquidated Damages, provided, however, the dates designated by Interconnection Customer shall be extended day for day for each day that the applicable System Operator refuses to grant clearances to install equipment.

**5.1.3 Option to Build.** If the dates designated by Interconnection Customer are not acceptable to Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall so notify the Interconnection Customer within thirty (30) Calendar Days, and unless the Parties agree otherwise, Interconnection Customer shall have the option to assume responsibility for the design, procurement and construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades on the dates specified in Article 5.1.2. The System Operator, Interconnecting Transmission Owner, Interconnection Customer, and any Affected Party as deemed appropriate by System Operator in accordance with applicable codes of conduct and confidentiality requirements must agree as to what constitutes Stand Alone Network Upgrades and identify such Stand Alone Network Upgrades in Appendix A to the ETU IA. Except for Stand Alone Network Upgrades, Interconnection Customer shall have no right to construct Network Upgrades under this option.

**5.1.4 Negotiated Option.** If the Interconnection Customer elects not to exercise its option under Article 5.1.3 (Option to Build), Interconnection Customer shall so notify Interconnecting Transmission Owner within thirty (30) Calendar Days, and the Parties shall in good faith attempt to negotiate terms and conditions (including revision of the specified dates and liquidated damages, the provision of incentives or the procurement and construction of a portion of the Interconnecting Transmission Owner's

Interconnection Facilities and Stand Alone Network Upgrades by Interconnection Customer) pursuant to which Interconnecting Transmission Owner is responsible for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades. If the Parties are unable to reach agreement on such terms and conditions, Interconnecting Transmission Owner shall assume responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades pursuant to 5.1.1 (Standard Option).

**5.2 General Conditions Applicable to Option to Build.** If Interconnection Customer assumes responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades,

- (1) the Interconnection Customer shall engineer, procure equipment, and construct the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades (or portions thereof) using Good Utility Practice and using standards and specifications provided in advance by the Interconnecting Transmission Owner;
- (2) Interconnection Customer's engineering, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades shall comply with all requirements of law to which Interconnecting Transmission Owner would be subject in the engineering, procurement or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (3) Interconnecting Transmission Owner shall review and approve the engineering design, equipment acceptance tests, and the construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;
- (4) prior to commencement of construction, Interconnection Customer shall provide to Interconnecting Transmission Owner a schedule for construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades, and shall promptly respond to requests for information from Interconnecting Transmission Owner;

(5) at any time during construction, Interconnecting Transmission Owner shall have the right to gain unrestricted access to the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades and to conduct inspections of the same;

(6) at any time during construction, should any phase of the engineering, equipment procurement, or construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades not meet the standards and specifications provided by Interconnecting Transmission Owner, the Interconnection Customer shall be obligated to remedy deficiencies in that portion of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades;

(7) the Interconnection Customer shall indemnify the Interconnecting Transmission Owner for claims arising from the Interconnection Customer's construction of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades under the terms and procedures applicable to Article 18.1 (Indemnity);

(8) the Interconnection Customer shall transfer control of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the Interconnecting Transmission Owner;

(9) Unless Parties otherwise agree, Interconnection Customer shall transfer ownership of Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to Interconnecting Transmission Owner;

(10) Interconnecting Transmission Owner shall approve and accept for operation and maintenance the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades to the extent engineered, procured, and constructed in accordance with this Article 5.2; and

(11) Interconnection Customer shall deliver to Interconnecting Transmission Owner "as built" drawings, information, and any other documents that are reasonably required by Interconnecting

Transmission Owner to assure that the Interconnection Facilities and Stand Alone Network Upgrades are built to the standards and specifications required by Interconnecting Transmission Owner.

**5.3 Liquidated Damages.** The actual damages to the Interconnection Customer, in the event the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades are not completed by the dates designated by the Interconnection Customer and accepted by the Interconnecting Transmission Owner pursuant to subparagraphs 5.1.2 or 5.1.4, above, may include Interconnection Customer's fixed operation and maintenance costs and lost opportunity costs. Such actual damages are uncertain and impossible to determine at this time. Because of such uncertainty, any liquidated damages paid by the Interconnecting Transmission Owner to the Interconnection Customer in the event that Interconnecting Transmission Owner does not complete any portion of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades by the applicable dates, shall be an amount equal to  $\frac{1}{2}$  of 1 percent per day of the actual cost of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, in the aggregate, for which Interconnecting Transmission Owner has assumed responsibility to design, procure and construct.

However, in no event shall the total liquidated damages exceed 20 percent of the actual cost of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades for which the Interconnecting Transmission Owner has assumed responsibility to design, procure, and construct. The foregoing payments will be made by the Interconnecting Transmission Owner to the Interconnection Customer as just compensation for the damages caused to the Interconnection Customer, which actual damages are uncertain and impossible to determine at this time, and as reasonable liquidated damages, but not as a penalty or a method to secure performance of this ETU IA. Liquidated damages, when the Parties agree to them, are the exclusive remedy for the Interconnecting Transmission Owner's failure to meet its schedule.

No liquidated damages shall be paid to Interconnection Customer if: (1) Interconnection Customer is not ready to commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to transmit power from the Elective Transmission Upgrade on the specified dates, unless the Interconnection Customer would have been able to

commence use of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades to transmit power from the Elective Transmission Upgrade, but for Interconnecting Transmission Owner's delay; (2) the Interconnecting Transmission Owner's failure to meet the specified dates is the result of the action or inaction of the Interconnection Customer or any other Interconnection Customer who has entered into an ETU IA with the Interconnecting Transmission Owner or any cause beyond Interconnecting Transmission Owner's reasonable control or reasonable ability to cure, including, but not limited to, actions by the System Operator that cause delays and/or delays in licensing, permitting or consents where the Interconnecting Transmission Owner has pursued such licenses, permits or consents in good faith; (3) the Interconnection Customer has assumed responsibility for the design, procurement and construction of the Interconnecting Transmission Owner's Interconnection Facilities and Stand Alone Network Upgrades; or (4) the Parties have otherwise agreed.

**5.4 Power System Stabilizers.** If a Power System Stabilizer or other frequency damping control equipment is required to be installed on the Elective Transmission Upgrade for the purpose of maintaining system stability, the Interconnection Customer shall procure, install, maintain and operate such equipment in accordance with the guidelines and procedures established by the System Operator and Interconnecting Transmission Owner, and consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator and Interconnecting Transmission Owner reserve the right to reasonably establish minimum acceptable settings for any installed Power System Stabilizers or other frequency damping control equipment, subject to the design and operating limitations of the Elective Transmission Upgrade. If the Elective Transmission Upgrade's Power System Stabilizers or other frequency damping control equipment are removed from service or not capable of automatic operation, the Interconnection Customer shall immediately notify the System Operator and Interconnecting Transmission Owner, or their designated representative.

**5.5 Equipment Procurement.** If responsibility for construction of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades is to be borne by the Interconnecting Transmission Owner, then the Interconnecting Transmission Owner shall commence design of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades and

procure necessary equipment as soon as practicable after all of the following conditions are satisfied, unless the Parties otherwise agree in writing:

**5.5.1** The Interconnecting Transmission Owner has completed the Facilities Study pursuant to the Facilities Study Agreement;

**5.5.2** The Interconnecting Transmission Owner has received written authorization to proceed with design and procurement from the Interconnection Customer by the date specified in Appendix B (Milestones); and

**5.5.3** The Interconnection Customer has provided security to the Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).

**5.6 Construction Commencement.** The Interconnecting Transmission Owner shall commence construction of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades for which it is responsible as soon as practicable after the following additional conditions are satisfied:

**5.6.1** Approval of the appropriate Governmental Authority has been obtained for any facilities requiring regulatory approval;

**5.6.2** Necessary real property rights and rights-of-way have been obtained, to the extent required for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades;

**5.6.3** The Interconnecting Transmission Owner has received written authorization to proceed with construction from the Interconnection Customer by the date specified in Appendix B (Milestones); and

**5.6.4** The Interconnection Customer has provided security to Interconnecting Transmission Owner in accordance with Article 11.5 by the dates specified in Appendix B (Milestones).

**5.7 Work Progress.** The Interconnection Customer and the Interconnecting Transmission Owner shall keep each Party informed, by written quarterly progress reports, as to the progress of their respective design, procurement and construction efforts in order to meet the dates specified in Appendix B (Milestones). Any Party may also, at any other time, request a written progress report from the other Parties. If, at any time, the Interconnection Customer determines that the completion of the Interconnecting Transmission Owner's Interconnection Facilities will not be required until after the specified In-Service Date, the Interconnection Customer, upon the System Operator's approval that the change in the In-Service Date will not constitute a Material Modification pursuant to Section 4.4 of the ETU IP, will provide written notice to the Interconnecting Transmission Owner of such later date upon which the completion of the Interconnecting Transmission Owner's Interconnection Facilities will be required.

**5.8 Information Exchange.** As soon as reasonably practicable after the Effective Date, the Parties shall exchange information regarding the design and compatibility of the Parties' Interconnection Facilities and compatibility of the Interconnection Facilities with the New England Transmission System, and shall work diligently and in good faith to make any necessary design changes.

**5.9 Limited Operation.** If any of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades are not reasonably expected to be completed prior to the Commercial Operation Date of the Elective Transmission Upgrade, System Operator and the Interconnecting Transmission Owner shall, upon the request and at the expense of Interconnection Customer, perform operating studies to determine the extent to which the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities may operate prior to the completion of the Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades consistent with Applicable Laws and Regulations, Applicable Reliability Standards, Good Utility Practice, and this ETU IA. System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to complete the operating studies and permit Interconnection Customer to operate the Elective Transmission



Upgrade and the Interconnection Customer's Interconnection Facilities in accordance with the results of such studies.

**5.10 Elective Transmission Upgrade ("ETU") and Interconnection Customer's Interconnection Facilities ("ICIF").** Interconnection Customer shall, at its expense, design, procure, construct, own and install the ICIF, as set forth in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.10.1 Elective Transmission Upgrade Specifications.** Interconnection Customer shall submit initial specifications for the ETU and ICIF, including System Protection Facilities, to Interconnecting Transmission Owner at least one hundred eighty (180) Calendar Days prior to the Trial Operation Date; and final specifications for review and comment at least ninety (90) Calendar Days prior to the Trial Operation Date. Interconnecting Transmission Owner shall review such specifications to ensure that the ETU and ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner and comment on such specifications within thirty (30) Calendar Days of Interconnection Customer's submission. All specifications provided hereunder shall be deemed confidential.

**5.10.2 Interconnecting Transmission Owner's Review.** Interconnecting Transmission Owner's review of Interconnection Customer's final specifications shall not be construed as confirming, endorsing, or providing a warranty as to the design, fitness, safety, durability or reliability of the ETU or the ICIF. Interconnection Customer shall make such changes to the ETU or the ICIF as may reasonably be required by Interconnecting Transmission Owner, in accordance with Good Utility Practice, to ensure that the ETU and ICIF are compatible with the technical specifications, operational control, and safety requirements of the Interconnecting Transmission Owner.

**5.10.3 ETU and ICIF Construction.** The ETU and ICIF shall be designed and constructed in accordance with Good Utility Practice. Within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnection Customer shall deliver to the Interconnecting

Transmission Owner “as-built” drawings, information and documents for the ETU and ICIF, such as: a one-line diagram, a site plan showing the ETU and the ICIF, plan and elevation drawings showing the layout of the ETU and ICIF, a relay functional diagram, relaying AC and DC schematic wiring diagrams and relay settings for all facilities associated with the ETU and the ICIF, and the impedances (determined by factory tests) for any associated transformers. The Interconnection Customer shall provide Interconnecting Transmission Owner specifications for any and all controls, automatic voltage regulating equipment or controls, ETU control and protection settings, transformer tap settings, and communications, if applicable.

- 5.11 Interconnecting Transmission Owner’s Interconnection Facilities Construction.** The Interconnecting Transmission Owner’s Interconnection Facilities shall be designed and constructed in accordance with Good Utility Practice. Upon request, within one hundred twenty (120) Calendar Days after the Commercial Operation Date, unless the Parties agree on another mutually acceptable deadline, the Interconnecting Transmission Owner shall deliver to the Interconnection Customer “as-built” drawings, information and documents for the Interconnecting Transmission Owner’s Interconnection Facilities. The appropriate drawings and relay diagrams shall be included in Appendix A of this ETU IA. The System Operator will obtain operational control of the Interconnecting Transmission Owner’s Interconnection Facilities and Stand Alone Network Upgrades upon completion of such facilities pursuant to the TOA.
- 5.12 Access Rights.** Upon reasonable notice and supervision by a Party, and subject to any required or necessary regulatory approvals, a Party (“Granting Party”) shall furnish at the incremental cost to another Party (“Access Party”) any rights of use, licenses, rights of way and easements with respect to lands owned or controlled by the Granting Party, its agents if allowed under the applicable agency agreement, that are necessary to enable the Access Party solely to obtain ingress and egress to construct, operate, maintain, repair, test (or witness testing), inspect, replace or remove facilities and equipment to: (i) interconnect the Elective Transmission Upgrade with the Administered Transmission System; (ii) operate and maintain the Elective Transmission Upgrade, the Interconnection Facilities and the New England Transmission System; and (iii) disconnect or remove the Access Party’s facilities and equipment upon termination of this ETU

IA. In exercising such licenses, rights of way and easements, the Access Party shall not unreasonably disrupt or interfere with normal operation of the Granting Party's business and shall adhere to the safety rules and procedures established in advance, as may be changed from time to time, by the Granting Party and provided to the Access Party.

- 5.13 Lands of Other Property Owners.** If any part of the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades is to be installed on property owned by persons other than Interconnection Customer or Interconnecting Transmission Owner, the Interconnecting Transmission Owner shall at Interconnection Customer's expense use Reasonable Efforts, including use of its eminent domain authority, and to the extent consistent with state law, to procure from such persons any rights of use, licenses, rights of way and easements that are necessary to construct, operate, maintain, test, inspect, replace or remove the Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades upon such property. Notwithstanding the foregoing, the Interconnecting Transmission Owner shall not be obligated to exercise eminent domain authority in a manner inconsistent with Applicable Laws and Regulations or when an Interconnection Customer is authorized under Applicable Laws and Regulations to exercise eminent domain on its own behalf.
- 5.14 Permits.** System Operator, Interconnecting Transmission Owner and Interconnection Customer shall cooperate with each other in good faith in obtaining all permits, licenses, and authorizations that are necessary to accomplish the interconnection in compliance with Applicable Laws and Regulations. With respect to this paragraph, Interconnecting Transmission Owner shall provide permitting assistance to the Interconnection Customer comparable to that provided to the Interconnecting Transmission Owner's own, or an Affiliate's generation or transmission facilities, if any.
- 5.15 Early Construction of Base Case Facilities.** Interconnection Customer may request Interconnecting Transmission Owner to construct, and Interconnecting Transmission Owner shall construct, using Reasonable Efforts to accommodate Interconnection Customer's In-Service Date, all or any portion of any Network Upgrades required for Interconnection Customer to be interconnected to the Administered Transmission System, which are included in the Base Case of the Facilities Study for the Interconnection Customer, and which also are required to be

constructed for another Interconnection Customer, but where such construction is not scheduled to be completed in time to achieve Interconnection Customer's In-Service Date. The Interconnection Customer shall reimburse the Interconnecting Transmission Owner for all costs incurred related to early construction to the extent such costs are not recovered from other Interconnection Customers included in the base case.

**5.16 Suspension.** Interconnection Customer reserves the right, upon written notice to Interconnecting Transmission Owner and System Operator, to suspend at any time all work by Interconnecting Transmission Owner associated with the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and/or Network Upgrades required under this ETU IA with the condition that the New England Transmission System shall be left in a safe and reliable condition in accordance with Good Utility Practice and the System Operator's and Interconnecting Transmission Owner's safety and reliability criteria. In such event, Interconnection Customer shall be responsible for all reasonable and necessary costs which Interconnecting Transmission Owner (i) has incurred pursuant to this ETU IA prior to the suspension and (ii) incurs in suspending such work, including any costs incurred to perform such work as may be necessary to ensure the safety of persons and property and the integrity of the New England Transmission System during such suspension and, if applicable, any costs incurred in connection with the cancellation or suspension of material, equipment and labor contracts which Interconnecting Transmission Owner cannot reasonably avoid; provided, however, that prior to canceling or suspending any such material, equipment or labor contract, Interconnecting Transmission Owner shall obtain Interconnection Customer's authorization to do so. Interconnecting Transmission Owner shall invoice Interconnection Customer for such costs pursuant to Article 12 and shall use due diligence to minimize its costs. In the event Interconnection Customer suspends work by Interconnecting Transmission Owner required under this ETU IA pursuant to this Article 5.16, and has not requested Interconnecting Transmission Owner to recommence the work required under this ETU IA on or before the expiration of three (3) years following commencement of such suspension, this ETU IA shall be deemed terminated. The three-year period shall begin on the date the suspension is requested, or the date of the written notice to Interconnecting Transmission Owner and System Operator, if no effective date is specified. A suspension under this Article 5.16 does not automatically permit an extension of the In-Service Date, the Trial Operation Date or the Commercial Operation Date. A request for

extension of such dates is subject to Section 4.4.5 of the ETU IP. Notwithstanding the extensions permitted under Section 4.4.5 of the ETU IP, the three-year period shall in no way result in an extension of the In-Service Date, the Trial Operation Date or the Commercial Operation Date that exceeds seven (7) years from the date of the Interconnection Request; otherwise, this ETU IA shall be deemed terminated.

## **5.17 Taxes.**

**5.17.1 Payments Not Taxable.** The Parties intend that all payments or property transfers made by any Party for the installation of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades shall be non-taxable, either as contributions to capital, or as an advance, in accordance with the Internal Revenue Code and any applicable state income tax laws and shall not be taxable as contributions in aid of construction or otherwise under the Internal Revenue Code and any applicable state income tax laws.

**5.17.2 Representations and Covenants.** In accordance with IRS Notice 2001-82 and IRS Notice 88-129, Interconnection Customer represents and covenants that (i) ownership of the electricity transmitted on the Elective Transmission Upgrade will pass to another party prior to the transmission of the electricity on the New England Transmission System, (ii) for income tax purposes, the amount of any payments and the cost of any property transferred to the Interconnecting Transmission Owner for the Interconnecting Transmission Owner's Interconnection Facilities will be capitalized by Interconnection Customer as an intangible asset and recovered using the straight-line method over a useful life of twenty (20) years, and (iii) any portion of the Interconnecting Transmission Owner's Interconnection Facilities that is a "dual-use intertie," within the meaning of IRS Notice 88-129, is reasonably expected to carry only a de minimis amount of electricity in the direction of the Elective Transmission Upgrade. For this purpose, "de minimis amount" means no more than 5 percent of the total power flows in both directions, calculated in accordance with the "5 percent test" set forth in IRS Notice 88-129. This is not intended to be an exclusive list of the relevant conditions that must be met to conform to IRS requirements for non-taxable treatment.

At Interconnecting Transmission Owner's request, Interconnection Customer shall provide Interconnecting Transmission Owner with a report from an independent engineer confirming its representation in clause (iii), above. Interconnecting Transmission Owner represents and covenants that the cost of the Interconnecting Transmission Owner's Interconnection Facilities paid for by Interconnection Customer will have no net effect on the base upon which rates are determined.

**5.17.3 Indemnification for the Cost Consequences of Current Tax Liability Imposed Upon Interconnecting Transmission Owner.** Notwithstanding Article 5.17.1, Interconnection Customer shall protect, indemnify and hold harmless Interconnecting Transmission Owner from the cost consequences of any current tax liability imposed against Interconnecting Transmission Owner as the result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this ETU IA, as well as any interest and penalties, other than interest and penalties attributable to any delay caused by Interconnecting Transmission Owner.

The Interconnecting Transmission Owner shall not include a gross-up for the cost consequences of any current tax liability in the amounts it charges Interconnection Customer under this ETU IA unless (i) Interconnecting Transmission Owner has determined, in good faith, that the payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner should be reported as income subject to taxation or (ii) any Governmental Authority directs Interconnecting Transmission Owner to report payments or property as income subject to taxation; provided, however, that Interconnecting Transmission Owner may require Interconnection Customer to provide security, in a form reasonably acceptable to Interconnecting Transmission Owner (such as a parental guarantee or a letter of credit), in an amount equal to the cost consequences of any current tax liability under this Article 5.17. Interconnection Customer shall reimburse Interconnecting Transmission Owner for such costs on a fully grossed-up basis, in accordance with Article 5.17.4, within thirty (30) Calendar Days of receiving written notification from Interconnecting Transmission Owner of the amount due, including detail about how the amount was calculated.

The indemnification obligation shall terminate at the earlier of (1) the expiration of the ten year testing period, and the applicable statute of limitation, as it may be extended by the Interconnecting Transmission Owner upon request of the IRS, to keep these years open for audit or adjustment, or (2) the occurrence of a subsequent taxable event and the payment of any related indemnification obligations as contemplated by this Article 5.17.

**5.17.4 Tax Gross-Up Amount.** Interconnection Customer's liability for the cost consequences of any current tax liability under this Article 5.17 shall be calculated on a fully grossed-up basis. Except as may otherwise be agreed to by the parties, this means that Interconnection Customer will pay Interconnecting Transmission Owner, in addition to the amount paid for the Interconnection Facilities and Network Upgrades, an amount equal to (1) the current taxes imposed on Interconnecting Transmission Owner ("Current Taxes") on the excess of (a) the gross income realized by Interconnecting Transmission Owner as a result of payments or property transfers made by Interconnection Customer to Interconnecting Transmission Owner under this ETU IA (without regard to any payments under this Article 5.17) (the "Gross Income Amount") over (b) the present value of future tax deductions for depreciation that will be available as a result of such payments or property transfers (the "Present Value Depreciation Amount"), plus (2) an additional amount sufficient to permit the Interconnecting Transmission Owner to receive and retain, after the payment of all Current Taxes, an amount equal to the net amount described in clause (1). For this purpose, (i) Current Taxes shall be computed based on Interconnecting Transmission Owner composite federal and state tax rates at the time the payments or property transfers are received and Interconnecting Transmission Owner will be treated as being subject to tax at the highest marginal rates in effect at that time (the "Current Tax Rate"), and (ii) the Present Value Depreciation Amount shall be computed by discounting Interconnecting Transmission Owner's anticipated tax depreciation deductions as a result of such payments or property transfers by Interconnecting Transmission Owner current weighted average cost of capital. Thus, the formula for calculating Interconnection Customer's liability to Transmission Owner pursuant to this Article 5.17.4 can be expressed as follows:  $(\text{Current Tax Rate} \times (\text{Gross Income Amount} - \text{Present Value of Tax Depreciation})) / (1 - \text{Current Tax Rate})$ . Interconnection Customer's

estimated tax liability in the event taxes are imposed shall be stated in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades).

**5.17.5 Private Letter Ruling or Change or Clarification of Law.** At Interconnection Customer's request and expense, Interconnecting Transmission Owner shall file with the IRS a request for a private letter ruling as to whether any property transferred or sums paid, or to be paid, by Interconnection Customer to Interconnecting Transmission Owner under this ETU IA are subject to federal income taxation. Interconnection Customer will prepare the initial draft of the request for a private letter ruling, and will certify under penalties of perjury that all facts represented in such request are true and accurate to the best of Interconnection Customer's knowledge. Interconnecting Transmission Owner and Interconnection Customer shall cooperate in good faith with respect to the submission of such request.

Interconnecting Transmission Owner shall keep Interconnection Customer fully informed of the status of such request for a private letter ruling and shall execute either a privacy act waiver or a limited power of attorney, in a form acceptable to the IRS, that authorizes Interconnection Customer to participate in all discussions with the IRS regarding such request for a private letter ruling. Interconnecting Transmission Owner shall allow Interconnection Customer to attend all meetings with IRS officials about the request and shall permit Interconnection Customer to prepare the initial drafts of any follow-up letters in connection with the request.

**5.17.6 Subsequent Taxable Events.** If, within ten (10) years from the date on which the relevant Interconnecting Transmission Owner's Interconnection Facilities are placed in service, (i) Interconnection Customer Breaches the covenant contained in Article 5.17.2, (ii) a "disqualification event" occurs within the meaning of IRS Notice 88-129, or (iii) this ETU IA terminates and Interconnecting Transmission Owner retains ownership of the Interconnection Facilities and Network Upgrades, the Interconnection Customer shall pay a tax gross-up for the cost consequences of any current tax liability imposed on Interconnecting Transmission Owner, calculated using the methodology described in Article 5.17.4 and in accordance with IRS Notice 90-60.



**5.17.7 Contests.** In the event any Governmental Authority determines that Interconnecting Transmission Owner's receipt of payments or property constitutes income that is subject to taxation, Interconnecting Transmission Owner shall notify Interconnection Customer, in writing, within thirty (30) Calendar Days of receiving notification of such determination by a Governmental Authority. Upon the timely written request by Interconnection Customer and at Interconnection Customer's sole expense, Interconnecting Transmission Owner may appeal, protest, seek abatement of, or otherwise oppose such determination. Upon Interconnection Customer's written request and sole expense, Interconnecting Transmission Owner may file a claim for refund with respect to any taxes paid under this Article 5.17, whether or not it has received such a determination. Interconnecting Transmission Owner reserves the right to make all decisions with regard to the prosecution of such appeal, protest, abatement or other contest, including the selection of counsel and compromise or settlement of the claim, but Interconnecting Transmission Owner shall keep Interconnection Customer informed, shall consider in good faith suggestions from Interconnection Customer about the conduct of the contest, and shall reasonably permit Interconnection Customer or an Interconnection Customer representative to attend contest proceedings.

Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, documented reasonable costs of prosecuting such appeal, protest, abatement or other contest. At any time during the contest, Interconnecting Transmission Owner may agree to a settlement either with Interconnection Customer's consent or after obtaining written advice from nationally-recognized tax counsel, selected by Interconnecting Transmission Owner, but reasonably acceptable to Interconnection Customer, that the proposed settlement represents a reasonable settlement given the hazards of litigation. Interconnection Customer's obligation shall be based on the amount of the settlement agreed to by Interconnection Customer, or if a higher amount, so much of the settlement that is supported by the written advice from nationally recognized tax counsel selected under the terms of the preceding sentence. The settlement amount shall be calculated on a fully grossed-up basis to cover any related cost consequences of the current tax liability. Any settlement

without Interconnection Customer's consent or such written advice will relieve Interconnection Customer from any obligation to indemnify Interconnecting Transmission Owner for the tax at issue in the contest.

**5.17.8 Refund.** In the event that (a) a private letter ruling is issued to Interconnecting Transmission Owner which holds that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this ETU IA is not subject to federal income taxation, (b) any legislative change or administrative announcement, notice, ruling or other determination makes it reasonably clear to Interconnecting Transmission Owner in good faith that any amount paid or the value of any property transferred by Interconnection Customer to Interconnecting Transmission Owner under the terms of this ETU IA is not taxable to Interconnecting Transmission Owner, (c) any abatement, appeal, protest, or other contest results in a determination that any payments or transfers made by Interconnection Customer to Interconnecting Transmission Owner are not subject to federal income tax, or (d) if Interconnecting Transmission Owner receives a refund from any taxing authority for any overpayment of tax attributable to any payment or property transfer made by Interconnection Customer to Interconnecting Transmission Owner pursuant to this ETU IA, Interconnecting Transmission Owner shall promptly refund to Interconnection Customer the following:

- (i) any payment made by Interconnection Customer under this Article 5.17 for taxes that is attributable to the amount determined to be non-taxable, together with interest thereon,
- (ii) interest on any amounts paid by Interconnection Customer to Interconnecting Transmission Owner for such taxes which Interconnecting Transmission Owner did not submit to the taxing authority, interest calculated in accordance with the methodology set forth in the Commission's regulations at 18 CFR §35.19a(a)(2)(iii) from the date payment was made by Interconnection Customer to the date Interconnecting Transmission Owner refunds such payment to Interconnection Customer, and

(iii) with respect to any such taxes paid by Interconnecting Transmission Owner, any refund or credit Interconnecting Transmission Owner receives or to which it may be entitled from any Governmental Authority, interest (or that portion thereof attributable to the payment described in clause (i), above) owed to the Interconnecting Transmission Owner for such overpayment of taxes (including any reduction in interest otherwise payable by Interconnecting Transmission Owner to any Governmental Authority resulting from an offset or credit); provided, however, that Interconnecting Transmission Owner will remit such amount promptly to Interconnection Customer only after and to the extent that Interconnecting Transmission Owner has received a tax refund, credit or offset from any Governmental Authority for any applicable overpayment of income tax related to the Interconnecting Transmission Owner's Interconnection Facilities.

The intent of this provision is to leave Parties, to the extent practicable, in the event that no taxes are due with respect to any payment for Interconnection Facilities and Network Upgrades hereunder, in the same position they would have been in had no such tax payments been made.

**5.17.9 Taxes Other Than Income Taxes.** Upon the timely request by Interconnection Customer, and at Interconnection Customer's sole expense, Interconnecting Transmission Owner shall appeal, protest, seek abatement of, or otherwise contest any tax (other than federal or state income tax) asserted or assessed against Interconnecting Transmission Owner for which Interconnection Customer may be required to reimburse Interconnecting Transmission Owner under the terms of this ETU IA. Interconnection Customer shall pay to Interconnecting Transmission Owner on a periodic basis, as invoiced by Interconnecting Transmission Owner, Interconnecting Transmission Owner's documented reasonable costs of prosecuting such appeal, protest, abatement, or other contest. Interconnection Customer and Interconnecting Transmission Owner shall cooperate in good faith with respect to any such contest. Unless the payment of such taxes is a prerequisite to an appeal or abatement or cannot be deferred, no amount shall

be payable by Interconnection Customer to Interconnecting Transmission Owner for such taxes until they are assessed by a final, non-appealable order by any court or agency of competent jurisdiction. In the event that a tax payment is withheld and ultimately due and payable after appeal, Interconnection Customer will be responsible for all taxes, interest and penalties, other than penalties attributable to any delay caused by Interconnecting Transmission Owner.

**5.18 Tax Status.** Each Party shall cooperate with the others to maintain the other Party's(ies') tax status. Nothing in this ETU IA is intended to adversely affect any Interconnecting Transmission Owner's tax-exempt status with respect to the issuance of bonds including, but not limited to, Local Furnishing Bonds.

**5.19 Modification.**

**5.19.1 General.** Either Interconnection Customer or Interconnecting Transmission Owner may undertake modifications to its facilities. If a Party plans to undertake a modification that reasonably may be expected to affect the other Party's facilities, the facilities of any Affected Parties, or the New England Transmission System, that Party shall provide to the other Parties and any Affected Party: (i) sufficient information regarding such modification so that the other Party(ies) may evaluate the potential impact of such modification prior to commencement of the work; and (ii) such information as may be required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Such information shall be deemed to be confidential hereunder and shall include information concerning the timing of such modifications and whether such modifications are expected to interrupt the flow of electricity from the Elective Transmission Upgrade. The Party desiring to perform such work shall provide the relevant drawings, plans, and specifications to the other Party(ies) at least ninety (90) Calendar Days in advance of the commencement of the work or such shorter period upon which the Parties may agree, which agreement shall not unreasonably be withheld, conditioned or delayed. Notwithstanding the foregoing, no Party shall be obligated to proceed with a modification that would constitute a Material Modification and therefore

require an Interconnection Request under the ETU IP, except as provided under and pursuant to the ETU IP.

In the case of Elective Transmission Upgrade or Interconnection Customer's Interconnection Facility modifications that do not require Interconnection Customer to submit an Interconnection Request, Interconnecting Transmission Owner shall provide, within thirty (30) Calendar Days (or such other time as the Parties may agree), an estimate of any additional modifications to the New England Transmission System, Interconnecting Transmission Owner's Interconnection Facilities or Network Upgrades necessitated by such Interconnection Customer modification and a good faith estimate of the costs thereof.

**5.19.2 Standards.** Any additions, modifications, or replacements made to a Party's facilities shall be designed, constructed and operated in accordance with this ETU IA and Good Utility Practice.

**5.19.3 Modification Costs.** Interconnection Customer shall not be directly assigned for the costs of any additions, modifications, or replacements that Interconnecting Transmission Owner makes to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System to facilitate the interconnection of a third party to the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System, or to provide transmission service to a third party under the Tariff, except as provided for under the Tariff or any other applicable tariff. Interconnection Customer shall be responsible for the costs of any additions, modifications, or replacements to the Elective Transmission Upgrade or Interconnection Customer's Interconnection Facilities that may be necessary to maintain or upgrade such Interconnection Customer's Interconnection Facilities consistent with Applicable Laws and Regulations, Applicable Reliability Standards or Good Utility Practice.

## **ARTICLE 6. TESTING AND INSPECTION**

- 6.1 Pre-Commercial Operation Date Testing and Modifications.** Prior to the Commercial Operation Date, the Interconnecting Transmission Owner shall test Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades and Interconnection Customer shall test the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities to ensure their safe and reliable operation. Similar testing may be required after initial operation. Each Party shall make any modifications to its facilities that are found to be necessary as a result of such testing. Interconnection Customer shall bear the cost of all such testing and modifications. Interconnection Customer shall transmit test energy to or from the Elective Transmission Upgrade only if it has arranged for the transfer of such test energy.
- 6.2 Post-Commercial Operation Date Testing and Modifications.** Each Interconnection Customer and Interconnecting Transmission Owner shall at its own expense perform routine inspection and testing of its facilities and equipment in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, as may be necessary to ensure the continued interconnection of the Elective Transmission Upgrade to the Administered Transmission System in a safe and reliable manner. The Interconnection Customer and Interconnecting Transmission Owner each shall have the right, upon advance written notice, to require reasonable additional testing of the other Party's(ies') facilities, at the requesting Party's expense, as may be in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The System Operator shall also have the right to require reasonable additional testing of the other Party's (ies') facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 6.3 Right to Observe Testing.** Each Party shall notify the System Operator and other Party(ies) in advance of its performance of tests of its Elective Transmission Upgrade and Interconnection Facilities. The other Party(ies) has the right, at its own expense, to observe such testing.
- 6.4 Right to Inspect.** Each Party shall have the right, but shall have no obligation to: (i) observe the other Party's(ies') tests and/or inspection of any of its System Protection Facilities and other protective equipment; (ii) review the settings of the other Party's(ies') System Protection Facilities and other protective equipment; and (iii) review the other Party's(ies') maintenance

records relative to the Interconnection Facilities, the System Protection Facilities and other protective equipment. Each Party may exercise these rights from time to time as it deems necessary upon reasonable notice to the other Parties. The exercise or non-exercise by a Party of any such rights shall not be construed as an endorsement or confirmation of any element or condition of the Interconnection Facilities or the System Protection Facilities or other protective equipment or the operation thereof, or as a warranty as to the fitness, safety, desirability, or reliability of same. Any information that a Party obtains through the exercise of any of its rights under this Article 6.4 shall be governed by Article 22.

## ARTICLE 7. METERING

- 7.1 General.** Interconnection Customer and Interconnecting Transmission Owner shall comply with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding metering. Interconnection Customer shall bear all reasonable documented costs associated with the purchase, installation, operation, testing and maintenance of the Metering Equipment. Unless the System Operator otherwise agrees, the Interconnection Customer shall be responsible for installing and maintaining compatible metering and communications equipment to accurately account for the capacity and energy being transmitted under this Tariff and to communicate the information to the System Operator. Unless otherwise agreed, such equipment shall remain the property of the Interconnecting Transmission Owner.
- 7.2 Check Meters.** Interconnection Customer, at its option and expense, may install and operate, on its premises and on its side of the Point of Interconnection, one or more check meters to check Interconnecting Transmission Owner's meters. Such check meters shall be for check purposes only and shall not be used for the measurement of power flows for purposes of this ETU IA, except as provided in Article 7.4 below. The check meters shall be subject at all reasonable times to inspection and examination by Interconnecting Transmission Owner or its designee. The installation, operation and maintenance thereof shall be performed entirely by Interconnection Customer in accordance with Good Utility Practice.
- 7.3 Standards.** Interconnection Customer and Interconnecting Transmission Owner shall install, calibrate, and test revenue quality Metering Equipment in accordance with applicable ANSI standards and the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 7.4 Testing of Metering Equipment.** Interconnection Customer and Interconnecting Transmission Owner shall inspect and test all of their respectively owned Metering Equipment upon installation and thereafter as specified in the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnection Customer and Interconnecting Transmission Owner shall give reasonable notice of the time when any inspection or test shall take place, and may have representatives present at the test or inspection. If at any time Metering Equipment is



found to be inaccurate or defective, it shall be adjusted, repaired or replaced at Interconnection Customer's expense, in order to provide accurate metering. If Metering Equipment fails to register, or if the measurement made by Metering Equipment during a test varies by more than the values specified within ISO New England Operating Documents, or successor documents, from the measurement made by the standard meter used in the test, the Interconnection Customer and the Interconnecting Transmission Owner shall adjust the measurements of their respective equipment, in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 7.5 Metering Data.** At Interconnection Customer's expense, metered data shall be telemetered to one or more locations designated by System Operator and Interconnecting Transmission Owner. The hourly integrated metering, established in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, used to transmit Megawatt hour ("MWh") per hour data by electronic means and the Watt-hour meters equipped with kilowatt-hour ("kwh") or MWh registers to be read at month's end shall be the official measurement of the amount of energy transmitted from the Elective Transmission Upgrade to the Point of Interconnection. Instantaneous metering is required in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 8. COMMUNICATIONS**

- 8.1 Interconnection Customer Obligations.** Interconnection Customer shall maintain satisfactory operating communications with the System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 8.2 Remote Terminal Unit.** Prior to the Trial Operation Date of the Elective Transmission Upgrade, a Remote Terminal Unit, or equivalent data collection and transfer equipment acceptable to the Parties, shall be installed by Interconnection Customer or Interconnecting Transmission Owner at Interconnection Customer's expense, to gather accumulated and instantaneous data to be telemetered to the location(s) designated by System Operator and Interconnecting Transmission Owner through use of a dedicated point-to-point data circuit(s). The communication protocol for

the data circuit(s) shall be specified by System Operator and Interconnecting Transmission Owner. All information required by the ISO New England Operating Documents, or successor documents, must be telemetered directly to the location(s) specified by System Operator and Interconnecting Transmission Owner.

Each Party will promptly advise the other Party(ies) if it detects or otherwise learns of any metering, telemetry or communications equipment errors or malfunctions that require the attention and/or correction by the other Party(ies). The Party owning such equipment shall correct such error or malfunction as soon as reasonably feasible.

**8.3 No Annexation.** Any and all equipment placed on the premises of a Party shall be and remain the property of the Party providing such equipment regardless of the mode and manner of annexation or attachment to real property, unless otherwise mutually agreed by the Parties.

**8.4 Reserved.**

## **ARTICLE 9. OPERATIONS**

**9.1 General.** Each Party shall comply with applicable provisions of ISO New England Operating Documents, Reliability Standards, or successor documents, regarding operations. Each Party shall provide to the other Party(ies) all information that may reasonably be required by the other Party(ies) to comply with Applicable Laws and Regulations and Applicable Reliability Standards.

**9.2 Control Area Notification.** Before Trial Operation Date, the Interconnection Customer shall notify the System Operator and Interconnecting Transmission Owner in writing in accordance with ISO New England Operating Documents, Reliability Standards, or successor documents. If the Interconnection Customer elects to have the Elective Transmission Upgrade dispatched and operated from a remote Control Area other than the Control Area in which the Elective Transmission Upgrade is physically located, and if permitted to do so by the relevant transmission tariffs and ISO New England Operating Documents, Reliability Standards, or successor documents, all necessary arrangements, including but not limited to those set forth in Article 7 and Article 8 of this ETU IA, and remote Control Area generator interchange agreements, if applicable, and the appropriate measures under such agreements, shall be executed

and implemented prior to the placement of the Elective Transmission Upgrade in the other Control Area for dispatch and operations.

**9.3 Interconnecting Transmission Owner and System Operator Obligations.** Interconnecting Transmission Owner and System Operator shall cause the Interconnecting Transmission Owner's Interconnection Facilities to be operated, maintained and controlled in a safe and reliable manner and in accordance with this ETU IA and ISO New England Operating Documents, Reliability Standards, or successor documents. Interconnecting Transmission Owner or System Operator may provide operating instructions to Interconnection Customer consistent with this ETU IA, ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and Interconnecting Transmission Owner's and System Operator's operating protocols and procedures as they may change from time to time. Interconnecting Transmission Owner and System Operator will consider changes to their operating protocols and procedures proposed by Interconnection Customer.

**9.4 Interconnection Customer Obligations.** Interconnection Customer shall at its own expense operate, maintain and control the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities in a safe and reliable manner and in accordance with this ETU IA and ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.5 Start-Up and Trial Operation.** The Interconnection Customer is responsible for the proper start-up and Trial Operation of the Elective Transmission Upgrade as part of the New England Transmission System in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6 Reactive Power.**

**9.6.1 Power Factor Design Criteria.** Interconnection Customer shall design the Elective Transmission Upgrade and Interconnection Facilities that are capable of voltage control to maintain a composite power delivery at continuous rated power output at the Point of Interconnection with dynamic reactive capability over the power factor range of 0.95

leading to 0.95 lagging or any reactive power or power factor requirement specified in the Interconnection System Impact Study for the Elective Transmission Upgrade, unless the System Operator or Interconnecting Transmission Owner has established different requirements that apply to all similar-situated facilities in the Control Area on a comparable basis and in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6.2 Voltage Schedules.** Once the Interconnection Customer has commenced Trial Operation of the Elective Transmission Upgrade to the New England Transmission System, Interconnection Customer shall operate the Elective Transmission Upgrade at the direction of System Operator and Interconnecting Transmission Owner in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, regarding voltage schedules in accordance with such requirements.

**9.6.2.1 Voltage Regulating Equipment.** The Interconnection Customer must keep and maintain voltage regulating equipment on all voltage-controlling elements of the Elective Transmission Upgrade and Interconnection Facilities any voltage control requirements specified in the Interconnection System Impact Study and in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. All Interconnection Customers that have, or are required to have, voltage regulating equipment shall normally operate the voltage regulating equipment in automatic operation.

It is the responsibility of the Interconnection Customer to maintain the voltage regulating equipment and function in good operating condition and promptly report to the System Operator and Interconnecting Transmission Owner any problems that could cause interference with its proper operation.

**9.6.2.2 Governor Control.** The Interconnection Customer is obligated to provide and maintain a functioning governor or frequency regulation on all elements of the Elective Transmission Upgrade and Interconnection Facilities that are capable of

frequency regulation in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

It is the responsibility of the Interconnection Customer to maintain the frequency regulating equipment and function in good operating condition and promptly report to the System Operator and Interconnecting Transmission Owner any problems that could cause interference with its proper operation.

**9.6.2.3 System Protection.** The Interconnection Customer shall install and maintain protection systems in accordance with applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.6.3 Payment for Reactive Power.**

Interconnection Customers shall be compensated for Reactive Power service in accordance with Schedule 2 of the Section II of the Tariff.

**9.7 Outages and Interruptions.**

**9.7.1 Outages.**

**9.7.1.1 Outage Authority and Coordination.** The System Operator shall have the authority to coordinate facility outages in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Each Party may in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, in coordination with the other Party(ies), remove from service any of its respective Interconnection Facilities or Network Upgrades that may impact the other Party's(ies') facilities as necessary to perform maintenance or testing or to install or replace equipment, subject to the oversight of System Operator in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.1.2 Outage Schedules.** Outage scheduling, and any related compensation, shall be in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.2 Interruption of Service.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, the System Operator or Interconnecting Transmission Owner may require Interconnection Customer to interrupt or reduce deliveries of electricity if such delivery of electricity could adversely affect System Operator's or Interconnecting Transmission Owner's ability to perform such activities as are necessary to safely and reliably operate and maintain the New England Transmission System.

**9.7.3 Under-Frequency and Over Frequency Conditions.** Interconnection Customer shall implement under-frequency and over-frequency protection set points for the Elective Transmission Upgrade and the Interconnection Facilities as required by the applicable provisions of ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Elective Transmission Upgrade response to frequency deviations of pre-determined magnitudes, both under-frequency and over-frequency deviations, shall be studied and coordinated with System Operator and Interconnecting Transmission Owner in accordance with ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4 System Protection and Other Control Requirements.**

**9.7.4.1 System Protection Facilities.** Interconnection Customer shall, at its expense, install, operate and maintain System Protection Facilities as a part of the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. Interconnecting Transmission Owner shall install at Interconnection Customer's expense, in accordance with the ISO New England Operating Documents, Applicable

Reliability Standards, or successor documents, any System Protection Facilities that may be required on the Interconnecting Transmission Owner Interconnection Facilities or the New England Transmission System as a result of the interconnection of the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities.

**9.7.4.2** Each Party's protection facilities shall be designed and coordinated with other systems in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.3** Each Party shall be responsible for protection of its facilities consistent with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.4.4** Each Party's protective relay design shall allow for tests required in Article 6.

**9.7.4.5** Each Party will test, operate and maintain System Protection Facilities in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**9.7.5 Requirements for Protection.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, and compliance with Good Utility Practice, Interconnection Customer shall provide, install, own, and maintain relays, circuit breakers and all other devices necessary to remove any fault contribution of the Elective Transmission Upgrade to any short circuit occurring on the New England Transmission System not otherwise isolated by Interconnecting Transmission Owner's equipment, such that the removal of the fault contribution shall be coordinated with the protective requirements of the New England Transmission System. Such protective equipment shall include, without limitation, a disconnecting device or switch with load-interrupting capability located between the Elective Transmission Upgrade and the New England Transmission System at a site selected upon mutual agreement (not to be unreasonably withheld, conditioned or delayed) of the Parties.

Interconnection Customer shall be responsible for protection of the Elective Transmission Upgrade and Interconnection Customer's other equipment from such conditions as negative sequence currents, over- or under-frequency, sudden load rejection, over- or under-voltage, and generator loss-of-field. Interconnection Customer shall be solely responsible to disconnect the Elective Transmission Upgrade and Interconnection Customer's other equipment if conditions on the New England Transmission System could adversely affect the Elective Transmission Upgrade. Relays and other equipment that protect for other conditions such as over- or under-frequency, over- or under-voltage, and overloads shall be coordinated with the protective requirements of the New England Transmission System.

**9.7.6 Power Quality.** A Party's facilities shall not cause excessive voltage flicker nor introduce excessive distortion to the sinusoidal voltage or current waves as defined by ANSI Standard C84.1-1989, in accordance with IEEE Standard 519, or any applicable superseding electric industry standard.

**9.8 Switching and Tagging Rules.** Each Party shall provide the other Party(ies) with a copy of its switching and tagging rules that are applicable to the other Party's activities. Such switching and tagging rules shall be developed on a non-discriminatory basis. The Parties shall comply with applicable switching and tagging rules, as amended from time to time, in obtaining clearances for work or for switching operations on equipment.

**9.9 Use of Interconnection Facilities by Third Parties.**

**9.9.1 Purpose of Interconnection Facilities.** Except as may be required by Applicable Laws and Regulations, or as otherwise agreed to among the Parties, the Interconnection Facilities shall be constructed for the sole purpose of interconnecting the Elective Transmission Upgrade to the Administered Transmission System and shall be used for no other purpose.

**9.9.2 Third Party Users.** If required by Applicable Laws and Regulations or if the Parties mutually agree, such agreement not to be unreasonably withheld, to allow one or more



third parties to use the Interconnecting Transmission Owner's Interconnection Facilities, or any part thereof, Interconnection Customer will be entitled to compensation for the capital expenses it incurred in connection with the Interconnection Facilities based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. In addition, cost responsibility for ongoing costs, including operation and maintenance costs associated with the Interconnection Facilities, will be allocated between Interconnection Customer and any third party users based upon the pro rata use of the Interconnection Facilities by Interconnecting Transmission Owner, all third party users, and Interconnection Customer, in accordance with Applicable Laws and Regulations or upon some other mutually agreed-upon methodology. If the issue of such compensation or allocation cannot be resolved through such negotiations, it shall be submitted to the Commission for resolution.

- 9.10 Disturbance Analysis Data Exchange.** The Parties will cooperate with one another in the analysis of disturbances to either the Elective Transmission Upgrade or the New England Transmission System by gathering and providing access to any information relating to any disturbance, including information from oscillography, protective relay targets, breaker operations and sequence of events records, and any disturbance information required by the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 10. MAINTENANCE**

- 10.1 Interconnecting Transmission Owner and Customer Obligations.** Interconnecting Transmission Owner and Interconnection Customer shall each maintain that portion of its respective facilities that are part of the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities in a safe and reliable manner and in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

- 10.2 Operating and Maintenance Expenses.** Subject to the provisions herein addressing the use of facilities by others, and except for operations and maintenance expenses associated with modifications made for providing interconnection or transmission service to a third party and such third party pays for such expenses, Interconnection Customer shall be responsible for all reasonable expenses including overheads, associated with: (1) owning, operating, maintaining, repairing, and replacing Interconnection Customer's Interconnection Facilities; and (2) operation, maintenance, repair and replacement of Interconnecting Transmission Owner's Interconnection Facilities, Stand Alone Network Upgrades, Network Upgrades and Distribution Upgrades.

## **ARTICLE 11. PERFORMANCE OBLIGATION**

- 11.1 Interconnection Customer's Interconnection Facilities.** Interconnection Customer shall design, procure, construct, install, own and/or control the Interconnection Customer's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at its sole expense.
- 11.2 Interconnecting Transmission Owner's Interconnection Facilities.** Interconnecting Transmission Owner shall design, procure, construct, install, own and/or control the Interconnecting Transmission Owner's Interconnection Facilities described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades) at the sole expense of the Interconnection Customer.
- 11.3 Network Upgrades and Distribution Upgrades.** Interconnecting Transmission Owner shall design, procure, construct, install, and own the Network Upgrades, and to the extent provided by Article 5.1, Stand Alone Network Upgrades, and Distribution Upgrades described in Appendix A (Interconnection Facilities, Network Upgrades and Distribution Upgrades). The Interconnection Customer shall be responsible for all costs related to Distribution Upgrades. Unless the Interconnecting Transmission Owner elects to fund the capital for the Network Upgrades, they shall be solely funded by the Interconnection Customer.
- 11.4 Cost Allocation; Compensation; Rights; Affected Systems**

**11.4.1 Cost Allocation.** Cost allocation of ETU Interconnection Related Upgrades shall be in accordance with Schedules 11 and 12 of Section II of the Tariff.

**11.4.2 Compensation.** Any compensation due to the Interconnection Customer for increases in transfer capability to the PTF resulting from its ETU and associated system upgrades shall be determined in accordance with Sections II and III of the Tariff.

**11.4.3 Rights.** Notwithstanding any other provision of this ETU IA, nothing herein shall be construed as relinquishing or foreclosing any rights, including but not limited to firm transmission rights, capacity rights, transmission congestion rights, or transmission credits, that the Interconnection Customer shall be entitled to, now or in the future, under any other agreement or tariff as a result of, or otherwise associated with, the transmission capacity, if any, created by the Network Upgrades.

**11.4.4 Special Provisions for Affected Systems.** The Interconnection Customer shall enter into separate related facilities agreements to address any upgrades to the Affected System(s) that are necessary for safe and reliable interconnection of the Interconnection Customer's Elective Transmission Upgrade.

**11.5 Provision of Security.** At least thirty (30) Calendar Days prior to the commencement of the procurement, installation, or construction of a discrete portion of an Interconnecting Transmission Owner's Interconnection Facilities, Network Upgrades, or Distribution Upgrades, Interconnection Customer shall provide Interconnecting Transmission Owner a guarantee, a surety bond, letter of credit or other form of security that is reasonably acceptable to Interconnecting Transmission Owner in accordance with the Tariff. In addition:

**11.5.1** The guarantee must be made by an entity that meets the creditworthiness requirements of Interconnecting Transmission Owner, and contain terms and conditions that guarantee payment of any amount that may be due from Interconnection Customer, up to an agreed-to maximum amount.

**11.5.2** The letter of credit must be issued by a financial institution reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.5.3** The surety bond must be issued by an insurer reasonably acceptable to Interconnecting Transmission Owner and must specify a reasonable expiration date.

**11.6 Interconnection Customer Compensation.** If System Operator or Interconnecting Transmission Owner requests or directs Interconnection Customer to provide a service pursuant to Articles 9.6.3 (Payment for Reactive Power), or 13.4.1 of this ETU IA, Interconnection Customer shall be compensated pursuant to the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**11.6.1 Interconnection Customer Compensation for Actions During Emergency Condition.** Interconnection Customer shall be compensated for its provision of real and reactive power and other Emergency Condition services that Interconnection Customer provides to support the New England Transmission System during an Emergency Condition in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

## **ARTICLE 12. INVOICE**

**12.1 General.** Each Party shall submit to the other Party(ies), on a monthly basis, invoices of amounts due for the preceding month. Each invoice shall state the month to which the invoice applies and fully describe the services and equipment provided. The Parties may discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts a Party owes to the other Party(ies) under this ETU IA, including interest payments or credits, shall be netted so that only the net amount remaining due shall be paid by the owing Party.

**12.2 Final Invoice.** Within six months after completion of the construction of the Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades, Interconnecting Transmission Owner shall provide an invoice of the final cost of the construction of the

Interconnecting Transmission Owner's Interconnection Facilities and the Network Upgrades and shall set forth such costs in sufficient detail to enable Interconnection Customer to compare the actual costs with the estimates and to ascertain deviations, if any, from the cost estimates.

Interconnecting Transmission Owner shall refund to Interconnection Customer any amount by which the actual payment by Interconnection Customer for estimated costs exceeds the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice. Interconnection Customer shall pay to Interconnecting Transmission Owner any amount by which the actual payment by Interconnection Customer for estimated costs falls short of the actual costs of construction within thirty (30) Calendar Days of the issuance of such final construction invoice.

**12.3 Payment.** Invoices shall be rendered to the paying Party at the address specified in Appendix F. The Party receiving the invoice shall pay the invoice within thirty (30) Calendar Days of receipt. All payments shall be made in immediately available funds payable to the other Party, or by wire transfer to a bank named and account designated by the invoicing Party. Payment of invoices by any Party will not constitute a waiver of any rights or claims the other Party(ies) may have under this ETU IA.

**12.4 Disputes.** In the event of a billing dispute between Interconnecting Transmission Owner and Interconnection Customer, Interconnecting Transmission Owner shall continue to provide Interconnection Service under this ETU IA as long as Interconnection Customer: (i) continues to make all payments not in dispute; and (ii) pays to Interconnecting Transmission Owner or into an independent escrow account the portion of the invoice in dispute, pending resolution of such dispute. If Interconnection Customer fails to meet these two requirements for continuation of service, then Interconnecting Transmission Owner may provide notice to Interconnection Customer of a Default pursuant to Article 17. Within thirty (30) Calendar Days after the resolution of the dispute, the Party that owes money to the other Party shall pay the amount due with interest calculated in accord with the methodology set forth in the Commission's Regulations at 18 CFR § 35.19a(a)(2)(iii).

## **ARTICLE 13. EMERGENCIES**

- 13.1 Obligations.** Each Party shall comply with the Emergency Condition procedures of the System Operator in accordance with the applicable provisions of the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.
- 13.2 Notice.** Interconnecting Transmission Owner or System Operator as applicable shall notify Interconnection Customer and System Operator or Interconnecting Transmission Owner as applicable, promptly when it becomes aware of an Emergency Condition that affects the Interconnecting Transmission Owner's Interconnection Facilities or the New England Transmission System that may reasonably be expected to affect Interconnection Customer's operation of the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall notify Interconnecting Transmission Owner and System Operator promptly when it becomes aware of an Emergency Condition that affects the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities that may reasonably be expected to affect the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities. To the extent information is known, the notification shall describe the Emergency Condition, the extent of the damage or deficiency, the expected effect on the operation of Interconnection Customer's or Interconnecting Transmission Owner's facilities and operations, its anticipated duration and the corrective action taken and/or to be taken. The initial notice shall be followed as soon as practicable with written notice.
- 13.3 Immediate Action.** Unless, in Interconnection Customer's reasonable judgment, immediate action is required, Interconnection Customer shall obtain the consent of Interconnecting Transmission Owner and System Operator, such consent to not be unreasonably withheld, prior to performing any manual switching operations at the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities in response to an Emergency Condition either declared by the Interconnecting Transmission Owner or the System Operator or otherwise regarding the New England Transmission System.
- 13.4 System Operator's and Interconnecting Transmission Owner's Authority.**

**13.4.1 General.** System Operator or Interconnecting Transmission Owner may take whatever actions or inactions with regard to the New England Transmission System or the Interconnecting Transmission Owner's Interconnection Facilities it deems necessary during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the New England Transmission System or Interconnecting Transmission Owner's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service.

System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to minimize the effect of such actions or inactions on the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities. System Operator and Interconnecting Transmission Owner may, on the basis of technical considerations and equipment capabilities, require the Elective Transmission Upgrade to mitigate an Emergency Condition by taking actions necessary and limited in scope to remedy the Emergency Condition, including, but not limited to, directing Interconnection Customer to shut-down, start-up, increase or decrease the real or reactive power output of the Elective Transmission Upgrade; implementing a reduction or disconnection pursuant to Article 13.4.2; directing the Interconnection Customer to assist with black start (if available) or restoration efforts; or altering the outage schedules of the Elective Transmission Upgrade and the Interconnection Customer's Interconnection Facilities. Interconnection Customer shall comply with all of System Operator's and Interconnecting Transmission Owner's operating instructions concerning Elective Transmission Upgrade real power and reactive power output within the manufacturer's design limitations of the Elective Transmission Upgrade's equipment that is in service and physically available for operation at the time, in compliance with Applicable Laws and Regulations.

**13.4.2 Reduction and Disconnection.** System Operator and Interconnecting Transmission Owner may reduce Interconnection Service or disconnect the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities when such reduction or disconnection is necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. These

rights are separate and distinct from any right of curtailment of the System Operator and Interconnecting Transmission Owner pursuant to the Tariff. When the System Operator and Interconnecting Transmission Owner can schedule the reduction or disconnection in advance, System Operator and Interconnecting Transmission Owner shall notify Interconnection Customer of the reasons, timing and expected duration of the reduction or disconnection. System Operator and Interconnecting Transmission Owner shall coordinate with the Interconnection Customer in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents to schedule the reduction or disconnection during periods of least impact to the Interconnection Customer and the System Operator and Interconnecting Transmission Owner. Any reduction or disconnection shall continue only for so long as reasonably necessary in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents. The Parties shall cooperate with each other to restore the Elective Transmission Upgrade, the Interconnection Facilities, and the New England Transmission System to their normal operating state as soon as practicable in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

**13.5 Interconnection Customer Authority.** In accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents and the ETU IA and the ETU IP, the Interconnection Customer may take whatever actions or inactions with regard to the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities during an Emergency Condition in order to (i) preserve public health and safety, (ii) preserve the reliability of the Elective Transmission Upgrade or the Interconnection Customer's Interconnection Facilities, (iii) limit or prevent damage, and (iv) expedite restoration of service. Interconnection Customer shall use Reasonable Efforts to minimize the effect of such actions or inactions on the New England Transmission System and the Interconnecting Transmission Owner's Interconnection Facilities. System Operator and Interconnecting Transmission Owner shall use Reasonable Efforts to assist Interconnection Customer in such actions.

**13.6 Limited Liability.** Except as otherwise provided in Article 11.6.1 of this ETU IA, a Party shall not be liable to another Party for any action it takes in responding to an Emergency Condition so



long as such action is made in good faith and in accordance with the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents.

#### **ARTICLE 14. REGULATORY REQUIREMENTS AND GOVERNING LAW**

**14.1 Regulatory Requirements.** Each Party's obligations under this ETU IA shall be subject to its receipt of any required approval or certificate from one or more Governmental Authorities in the form and substance satisfactory to the applying Party, or the Party making any required filings with, or providing notice to, such Governmental Authorities, and the expiration of any time period associated therewith. Each Party shall in good faith seek and use its Reasonable Efforts to obtain such other approvals. Nothing in this ETU IA shall require Interconnection Customer to take any action that could result in its inability to obtain, or its loss of, status or exemption under the Federal Power Act or the Public Utility Holding Company Act of 1935, as amended. To the extent that a condition arises that could result in Interconnection Customer's inability to obtain, or its loss of, status or exemption under the Federal Power Act, the Public Utility Holding Company Act of 1935, as amended, or the Public Utility Regulatory Policies Act of 1978, the Parties shall engage in good faith negotiations to address the condition so that such result will not occur and so that this ETU IA can be performed.

#### **14.2 Governing Law.**

**14.2.1** The validity, interpretation and performance of this ETU IA and each of its provisions shall be governed by the laws of the state where the Point of Interconnection is located, without regard to its conflicts of law principles.

**14.2.2** This ETU IA is subject to all Applicable Laws and Regulations.

**14.2.3** Each Party expressly reserves the right to seek changes in, appeal, or otherwise contest any laws, orders, rules, or regulations of a Governmental Authority.

#### **ARTICLE 15. NOTICES**

- 15.1 General.** Unless otherwise provided in this ETU IA, any notice, demand or request required or permitted to be given by a Party to another Party and any instrument required or permitted to be tendered or delivered by a Party in writing to another Party shall be effective when delivered and may be so given, tendered or delivered, by recognized national courier, or by depositing the same with the United States Postal Service with postage prepaid, for delivery by certified or registered mail, addressed to the Party, or personally delivered to the Party, at the address set out in Appendix F (Addresses for Delivery of Notices and Billings).  
A Party may change the notice information in this ETU IA by giving five (5) Business Days written notice prior to the effective date of the change.
- 15.2 Billings and Payments.** Billings and payments shall be sent to the addresses set out in Appendix F.
- 15.3 Alternative Forms of Notice.** Any notice or request required or permitted to be given by a Party to another Party and not required by this Agreement to be given in writing may be so given by telephone, facsimile or email to the telephone numbers and email addresses set out in Appendix F.
- 15.4 Operations and Maintenance Notice.** Each Party shall notify the other Party(ies) in writing of the identity of the person(s) that it designates as the point(s) of contact with respect to the implementation of Articles 9 and 10.

## **ARTICLE 16. FORCE MAJEURE**

### **16.1 Force Majeure.**

**16.1.1** Economic hardship is not considered a Force Majeure event.

**16.1.2** A Party shall not be considered to be in Default with respect to any obligation hereunder (including obligations under Article 4), other than the obligation to pay money when due, if prevented from fulfilling such obligation by Force Majeure. A Party unable to fulfill any obligation hereunder (other than an obligation to pay money when due) by reason of

Force Majeure shall give notice and the full particulars of such Force Majeure to the other Party(ies) in writing or by telephone as soon as reasonably possible after the occurrence of the cause relied upon. Telephone notices given pursuant to this Article shall be confirmed in writing as soon as reasonably possible and shall specifically state full particulars of the Force Majeure, the time and date when the Force Majeure occurred and when the Force Majeure is reasonably expected to cease. The Party affected shall exercise due diligence to remove such disability with reasonable dispatch, but shall not be required to accede or agree to any provision not satisfactory to it in order to settle and terminate a strike or other labor disturbance.

## **ARTICLE 17. DEFAULT**

### **17.1 Default.**

**17.1.1 General.** No Breach shall exist where such failure to discharge an obligation (other than the payment of money) is the result of Force Majeure as defined in this ETU IA or the result of an act or omission of the other Party(ies). Upon a Breach, the non-Breaching Party shall give written notice of such Breach to the breaching Party. Except as provided in Article 17.1.2, the Breaching Party shall have thirty (30) Calendar Days from receipt of the Breach notice within which to cure such Breach; provided however, if such Breach is not capable of cure within thirty (30) Calendar Days, the Breaching Party shall commence such cure within thirty (30) Calendar Days after notice and continuously and diligently complete such cure within ninety (90) Calendar Days from receipt of the Breach notice; and, if cured within such time, the Breach specified in such notice shall cease to exist.

**17.1.2 Right to Terminate.** If a Breach is not cured as provided in this Article, or if a Breach is not capable of being cured within the period provided for herein, the non-Breaching Party(ies) shall have the right to terminate this ETU IA by written notice at any time until cure occurs, and be relieved of any further obligation hereunder and, whether or not those Parties terminate this ETU IA, to recover from the Breaching Party all amounts due

hereunder, plus all other damages and remedies to which they are entitled at law or in equity. The provisions of this Article will survive termination of this ETU IA.

## **ARTICLE 18. INDEMNITY, CONSEQUENTIAL DAMAGES AND INSURANCE**

Notwithstanding any other provision of this Agreement, the liability, indemnification and insurance provisions of the Transmission Operating Agreement (“TOA”) or other applicable operating agreements shall apply to the relationship between the System Operator and the Interconnecting Transmission Owner and the liability, indemnification and insurance provisions of the Tariff apply to the relationship between the System Operator and the Interconnection Customer and between the Interconnecting Transmission Owner and the Interconnection Customer.

**18.1 Indemnity.** Each Party shall at all times indemnify, defend, and save the other Party(ies) harmless from any and all damages, losses, claims, including claims and actions relating to injury to or death of any person or damage to property, demand, suits, recoveries, costs and expenses, court costs, attorney fees, and all other obligations by or to third parties, arising out of or resulting from the other Party’s(ies’) action or inactions of their obligations under this ETU IA on behalf of the Indemnifying Party, except in cases of gross negligence or intentional wrongdoing by an indemnified Party.

**18.1.1 Indemnified Person.** If an Indemnified Person is entitled to indemnification under this Article 18 as a result of a claim by a third party, and the Indemnifying Party fails, after notice and reasonable opportunity to proceed under Article 18.1, to assume the defense of such claim, such Indemnified Person may at the expense of the Indemnifying Party contest, settle or consent to the entry of any judgment with respect to, or pay in full, such claim.

**18.1.2 Indemnifying Party.** If an Indemnifying Party is obligated to indemnify and hold any Indemnified Person harmless under this Article 18, the amount owing to the Indemnified

Person shall be the amount of such Indemnified Person's actual Loss, net of any insurance or other recovery.

**18.1.3 Indemnity Procedures.** Promptly after receipt by an Indemnified Person of any claim or notice of the commencement of any action or administrative or legal proceeding or investigation as to which the indemnity provided for in Article 18.1 may apply, the Indemnified Person shall notify the Indemnifying Party of such fact. Any failure of or delay in such notification shall not affect a Party's indemnification obligation unless such failure or delay is materially prejudicial to the Indemnifying Party.

The Indemnifying Party shall have the right to assume the defense thereof with counsel designated by such Indemnifying Party and reasonably satisfactory to the Indemnified Person. If the defendants in any such action include one or more Indemnified Persons and the Indemnifying Party and if the Indemnified Person reasonably concludes that there may be legal defenses available to it and/or other Indemnified Persons which are different from or additional to those available to the Indemnifying Party, the Indemnified Person shall have the right to select separate counsel to assert such legal defenses and to otherwise participate in the defense of such action on its own behalf. In such instances, the Indemnifying Party shall only be required to pay the fees and expenses of one additional attorney to represent an Indemnified Person or Indemnified Persons having such differing or additional legal defenses.

The Indemnified Person shall be entitled, at its expense, to participate in any such action, suit or proceeding, the defense of which has been assumed by the Indemnifying Party. Notwithstanding the foregoing, the Indemnifying Party (i) shall not be entitled to assume and control the defense of any such action, suit or proceedings if and to the extent that, in the opinion of the Indemnified Person and its counsel, such action, suit or proceeding involves the potential imposition of criminal liability on the Indemnified Person, or there exists a conflict or adversity of interest between the Indemnified Person and the Indemnifying Party, in which event the Indemnifying Party shall pay the reasonable expenses of the Indemnified Person, and (ii) shall not settle or consent to the entry of any

judgment in any action, suit or proceeding without the consent of the Indemnified Person, which shall not be reasonably withheld, conditioned or delayed.

**18.2 Consequential Damages.** Other than the Liquidated Damages heretofore described, in no event shall a Party be liable under any provision of this ETU IA for any losses, damages, costs or expenses for any special, indirect, incidental, consequential, or punitive damages, including but not limited to loss of profit or revenue, loss of the use of equipment, cost of capital, cost of temporary equipment or services, whether based in whole or in part in contract, in tort, including negligence, strict liability, or any other theory of liability; provided, however, that damages for which a Party may be liable to the other Party under another agreement will not be considered to be special, indirect, incidental, or consequential damages hereunder.

**18.3 Insurance.** The Interconnecting Transmission Owner and the Interconnection Customer shall, at their own expense, maintain in force throughout the period of this ETU IA, and until released by the other Party(ies), the following minimum insurance coverages, with insurers authorized to do business in the state where the Point of Interconnection is located:

**18.3.1** Employers' Liability and Workers' Compensation Insurance providing statutory benefits in accordance with the laws and regulations of the state in which the Point of Interconnection is located.

**18.3.2** Commercial General Liability Insurance including premises and operations, personal injury, broad form property damage, broad form blanket contractual liability coverage (including coverage for the contractual indemnification) products and completed operations coverage, coverage for explosion, collapse and underground hazards, independent contractors coverage, coverage for pollution to the extent normally available and punitive damages to the extent normally available and a cross liability endorsement, with minimum limits of One Million Dollars (\$1,000,000) per occurrence/One Million Dollars (\$1,000,000) aggregate combined single limit for personal injury, bodily injury, including death, and property damage.

- 18.3.3** Comprehensive Automobile Liability Insurance for coverage of owned and non-owned and hired vehicles, trailers or semi-trailers designed for travel on public roads, with a minimum, combined single limit of One Million Dollars (\$1,000,000) per occurrence for bodily injury, including death, and property damage.
- 18.3.4** Excess Public Liability Insurance over and above the Employers' Liability Commercial General Liability and Comprehensive Automobile Liability Insurance coverage, with a minimum combined single limit of Twenty Million Dollars (\$20,000,000) per occurrence/Twenty Million Dollars (\$20,000,000) aggregate.
- 18.3.5** The Commercial General Liability Insurance, Comprehensive Automobile Insurance and Excess Public Liability Insurance policies shall name the other Party(ies), its parent, associated and Affiliate companies and their respective directors, officers, agents, servants and employees ("Other Party Group") as additional insured. All policies shall contain provisions whereby the insurers waive all rights of subrogation in accordance with the provisions of this ETU IA against the Other Party Group and provide thirty (30) Calendar Days advance written notice to the Other Party Group prior to anniversary date of cancellation or any material change in coverage or condition.
- 18.3.6** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies shall contain provisions that specify that the policies are primary and shall apply to such extent without consideration for other policies separately carried and shall state that each insured is provided coverage as though a separate policy had been issued to each, except the insurer's liability shall not be increased beyond the amount for which the insurer would have been liable had only one insured been covered. Each Party shall be responsible for its respective deductibles or retentions.
- 18.3.7** The Commercial General Liability Insurance, Comprehensive Automobile Liability Insurance and Excess Public Liability Insurance policies, if written on a Claims First Made Basis, shall be maintained in full force and effect for two (2) years after

termination of this ETU IA, which coverage may be in the form of tail coverage or extended reporting period coverage if agreed by the Parties.

**18.3.8** The requirements contained herein as to the types and limits of all insurance to be maintained by the Parties are not intended to and shall not in any manner, limit or qualify the liabilities and obligations assumed by the Parties under this ETU IA.

**18.3.9** Within ten (10) days following execution of this ETU IA, and as soon as practicable after the end of each fiscal year or at the renewal of the insurance policy and in any event within ninety (90) days thereafter, each Party shall provide certification of all insurance required in this ETU IA, executed by each insurer or by an authorized representative of each insurer.

**18.3.10** Notwithstanding the foregoing, each Party may self-insure to meet the minimum insurance requirements of Articles 18.3.2 through 18.3.8 to the extent it maintains a self-insurance program, provided that such Party's senior secured debt is rated at investment grade, or better, by Standard & Poor's and that its self-insurance program meets the minimum insurance requirements of Articles 18.3.2 through 18.3.8. For any period of time that a Party's senior secured debt is unrated by Standard & Poor's or is rated at less than investment grade by Standard & Poor's, such Party shall comply with the insurance requirements applicable to it under Articles 18.3.2 through 18.3.9. In the event that a Party is permitted to self-insure pursuant to this Article, it shall notify the other Party(ies) that it meets the requirements to self-insure and that its self-insurance program meets the minimum insurance requirements in a manner consistent with that specified in Article 18.3.9.

**18.3.11** The Parties agree to report to each other in writing as soon as practical all accidents or occurrences resulting in injuries to any person, including death, and any property damage arising out of this ETU IA.

## **ARTICLE 19. ASSIGNMENT**



**19.1 Assignment.** This ETU IA may be assigned by any Party only with the written consent of the other Parties; provided that the Parties may assign this ETU IA without the consent of the other Parties to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this ETU IA; and provided further that the Interconnection Customer shall have the right to assign this ETU IA, without the consent of the Interconnecting Transmission Owner or System Operator, for collateral security purposes to aid in providing financing for the Elective Transmission Upgrade, provided that the Interconnection Customer will promptly notify the Interconnecting Transmission Owner and System Operator of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the Interconnecting Transmission Owner and System Operator of the date and particulars of any such exercise of assignment right(s), including providing the Interconnecting Transmission Owner with proof that it meets the requirements of Articles 11.5 and 18.3. Any attempted assignment that violates this Article is void and ineffective. Any assignment under this ETU IA shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

## **ARTICLE 20. SEVERABILITY**

**20.1 Severability.** If any provision in this ETU IA is finally determined to be invalid, void or unenforceable by any court or other Governmental Authority having jurisdiction, such determination shall not invalidate, void or make unenforceable any other provision, agreement or covenant of this ETU IA; provided that if the Interconnection Customer (or any third party, but only if such third party is not acting at the direction of the Interconnecting Transmission Owner) seeks and obtains such a final determination with respect to any provision of the Alternate Option (Article 5.1.2), or the Negotiated Option (Article 5.1.4), then none of these provisions shall thereafter have any force or effect and the Parties' rights and obligations shall be governed solely by the Standard Option (Article 5.1.1).

## **ARTICLE 21. COMPARABILITY**

- 21.1 Comparability.** The Parties will comply with all applicable comparability and code of conduct laws, rules and regulations, as amended from time to time.

## **ARTICLE 22. CONFIDENTIALITY**

- 22.1 Confidentiality.** Confidential Information shall include, without limitation, all information governed by the ISO New England Information Policy, all information obtained from third parties under confidentiality agreements, all information relating to a Party's technology, research and development, business affairs, and pricing, and any information supplied by a Party to another prior to the execution of this ETU IA.

Information is Confidential Information only if it is clearly designated or marked in writing as confidential on the face of the document, or, if the information is conveyed orally or by inspection, if the Party providing the information orally informs the Party receiving the information that the information is confidential.

If requested by a Party, the other Party(ies) shall provide, in writing, the basis for asserting that the information referred to in this Article warrants confidential treatment, and the requesting Party may disclose such writing to the appropriate Governmental Authority. Each Party shall be responsible for the costs associated with affording confidential treatment to its information.

- 22.1.1 Term.** During the term of this ETU IA, and for a period of three (3) years after the expiration or termination of this ETU IA, except as otherwise provided in this Article 22, each Party shall hold in confidence and shall not disclose to any person Confidential Information.

- 22.1.2 Scope.** Confidential Information shall not include information that the receiving Party can demonstrate: (1) is generally available to the public other than as a result of a disclosure by the receiving Party; (2) was in the lawful possession of the receiving Party

on a non-confidential basis before receiving it from the disclosing Party; (3) was supplied to the receiving Party without restriction by a third party, who, to the knowledge of the receiving Party after due inquiry, was under no obligation to the disclosing Party to keep such information confidential; (4) was independently developed by the receiving Party without reference to Confidential Information of the disclosing Party; (5) is, or becomes, publicly known, through no wrongful act or omission of the receiving Party or Breach of this ETU IA; or (6) is required, in accordance with Article 22.1.7 of the ETU IA, Order of Disclosure, to be disclosed by any Governmental Authority or is otherwise required to be disclosed by law or subpoena, or is necessary in any legal proceeding establishing rights and obligations under this ETU IA. Information designated as Confidential Information will no longer be deemed confidential if the Party that designated the information as confidential notifies the other Party(ies) that it no longer is confidential.

**22.1.3 Release of Confidential Information.** A Party shall not release or disclose Confidential Information to any other person, except to its Affiliates (limited by the Standards of Conduct requirements), subcontractors, employees, consultants, or to parties who may be or are considering providing financing to or equity participation with Interconnection Customer, or to potential purchasers or assignees of Interconnection Customer, on a need-to-know basis in connection with this ETU IA, unless such person has first been advised of the confidentiality provisions of this Article 22 and has agreed to comply with such provisions. Notwithstanding the foregoing, a Party providing Confidential Information to any person shall remain primarily responsible for any release of Confidential Information in contravention of this Article 22.

**22.1.4 Rights.** Each Party retains all rights, title, and interest in the Confidential Information that each Party discloses to the other Party(ies). The disclosure by each Party to the other Party(ies) of Confidential Information shall not be deemed a waiver by a Party or any other person or entity of the right to protect the Confidential Information from public disclosure.

**22.1.5 No Warranties.** By providing Confidential Information, a Party does not make any warranties or representations as to its accuracy or completeness. In addition, by supplying Confidential Information, a Party does not obligate itself to provide any

particular information or Confidential Information to the other Party(ies) nor to enter into any further agreements or proceed with any other relationship or joint venture.

**22.1.6 Standard of Care.** Each Party shall use at least the same standard of care to protect Confidential Information it receives as it uses to protect its own Confidential Information from unauthorized disclosure, publication or dissemination. Each Party may use Confidential Information solely to fulfill its obligations to the other Party(ies) under this ETU IA or its regulatory requirements.

**22.1.7 Order of Disclosure.** If a court or a Governmental Authority or entity with the right, power, and apparent authority to do so requests or requires a Party, by subpoena, oral deposition, interrogatories, requests for production of documents, administrative order, or otherwise, to disclose Confidential Information, that Party shall provide the other Party(ies) with prompt notice of such request(s) or requirement(s) so that the other Party(ies) may seek an appropriate protective order or waive compliance with the terms of this ETU IA. Notwithstanding the absence of a protective order or waiver, the Party may disclose such Confidential Information which, in the opinion of its counsel, the Party is legally compelled to disclose. Each Party will use Reasonable Efforts to obtain reliable assurance that confidential treatment will be accorded any Confidential Information so furnished.

**22.1.8 Termination of Agreement.** Upon termination of this ETU IA for any reason, each Party shall, within ten (10) Calendar Days of receipt of a written request from the other Party(ies), use Reasonable Efforts to destroy, erase, or delete (with such destruction, erasure, and deletion certified in writing to the other Party(ies)) or return to the other Party(ies), without retaining copies thereof, any and all written or electronic Confidential Information received from the other Party(ies).

**22.1.9 Remedies.** The Parties agree that monetary damages would be inadequate to compensate a Party for the other Party's(ies') Breach of its obligations under this Article 22. Each Party accordingly agrees that the other Party(ies) shall be entitled to equitable relief, by way of injunction or otherwise, if the first Party Breaches or threatens to Breach its

obligations under this Article 22, which equitable relief shall be granted without bond or proof of damages, and the receiving Parties shall not plead in defense that there would be an adequate remedy at law. Such remedy shall not be deemed an exclusive remedy for the Breach of this Article 22, but shall be in addition to all other remedies available at law or in equity. The Parties further acknowledge and agree that the covenants contained herein are necessary for the protection of legitimate business interests and are reasonable in scope. No Party, however, shall be liable for indirect, incidental, or consequential or punitive damages of any nature or kind resulting from or arising in connection with this Article 22.

**22.1.10 Disclosure to the Commission, its Staff, or a State.** Notwithstanding anything in this Article 22 to the contrary, and pursuant to 18 CFR. section 1b.20, if the Commission or its staff, during the course of an investigation or otherwise, requests information from one of the Parties that is otherwise required to be maintained in confidence pursuant to this ETU IA, the Party shall provide the requested information to the Commission or its staff, within the time provided for in the request for information. In providing the information to the Commission or its staff, the Party must, consistent with 18 CFR section 388.112, request that the information be treated as confidential and non-public by the Commission and its staff and that the information be withheld from public disclosure. Parties are prohibited from notifying the other Party(ies) to this ETU IA prior to the release of the Confidential Information to the Commission or its staff. The Party shall notify the other Party(ies) to the ETU IA when it is notified by the Commission or its staff that a request to release Confidential Information has been received by the Commission, at which time any of the Parties may respond before such information would be made public, pursuant to 18 CFR section 388.112. Requests from a state regulatory body conducting a confidential investigation shall be treated in a similar manner if consistent with the applicable state rules and regulations.

**22.1.11** Subject to the exception in Article 22.1.10, any information that a Party claims is competitively sensitive, commercial or financial information under this ETU IA (“Confidential Information”) shall not be disclosed by the other Party(ies) to any person not employed or retained by the other Party(ies), except to the extent disclosure

is (i) required by law; (ii) reasonably deemed by the disclosing Party to be required to be disclosed in connection with a dispute between or among the Parties, or the defense of litigation or dispute; (iii) otherwise permitted by consent of the other Party(ies), such consent not to be unreasonably withheld; or (iv) necessary to fulfill its obligations under this ETU IA or as a transmission service provider or a Control Area operator including disclosing the Confidential Information to an RTO or ISO or to a regional or national reliability organization. The Party asserting confidentiality shall notify the other Party(ies) in writing of the information it claims is confidential. Prior to any disclosures of the other Parties' Confidential Information under this subparagraph, or if any third party or Governmental Authority makes any request or demand for any of the information described in this subparagraph, the disclosing Party agrees to promptly notify the other Party(ies) in writing and agrees to assert confidentiality and cooperate with the other Party(ies) in seeking to protect the Confidential Information from public disclosure by confidentiality agreement, protective order or other reasonable measures.

## **ARTICLE 23. ENVIRONMENTAL RELEASES**

- 23.1** Each Party shall notify the other Party(ies), first orally and then in writing, of the release of any Hazardous Substances, any asbestos or lead abatement activities, or any type of remediation activities related to the Elective Transmission Upgrade or the Interconnection Facilities, each of which may reasonably be expected to affect the other Party(ies). The notifying Party shall: (i) provide the notice as soon as practicable, provided such Party makes a good faith effort to provide the notice no later than twenty-four (24) hours after such Party becomes aware of the occurrence; and (ii) promptly furnish to the other Party(ies) copies of any publicly available reports filed with any Governmental Authorities addressing such events.

## **ARTICLE 24. INFORMATION REQUIREMENTS**

- 24.1 Information Acquisition.** Subject to any applicable confidentiality restrictions, including, but not limited to, codes of conduct, each Party shall submit specific information regarding the

electrical characteristics of their respective facilities to each other as described below and in accordance with Applicable Reliability Standards.

**24.2 Information Submission by System Operator and Interconnecting Transmission Owner.**

The initial information submission by System Operator and Interconnecting Transmission Owner shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation Date and shall include information necessary to allow the Interconnection Customer to select equipment and meet any system protection and stability requirements, unless otherwise mutually agreed to by the Parties. On a monthly basis Interconnecting Transmission Owner shall provide Interconnection Customer a status report on the construction and installation of Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades, including, but not limited to, the following information: (1) progress to date; (2) a description of the activities since the last report; (3) a description of the action items for the next period; and (4) the delivery status of equipment ordered.

**24.3 Updated Information Submission by Interconnection Customer.** The updated information submission by the Interconnection Customer, including manufacturer information, shall occur no later than one hundred eighty (180) Calendar Days prior to the Trial Operation Date.

Interconnection Customer shall submit a completed copy of the Elective Transmission Upgrade data requirements contained in Appendix 1 to the ETU IP. It shall also include any additional information provided to Interconnecting Transmission Owner and System Operator for the Interconnection Feasibility Study, Interconnection System Impact Study and Interconnection Facilities Study. Information in this submission shall be the most current Elective Transmission Upgrade design or expected performance data. Information submitted for stability models shall be compatible with Interconnecting Transmission Owner and System Operator standard models. If there is no compatible model, the Interconnection Customer will work with a consultant mutually agreed to by the Parties to develop and supply a standard model and associated information.

If the Interconnection Customer's data is different from what was originally provided to Interconnecting Transmission Owner pursuant to the Interconnection Study Agreement between Interconnecting Transmission Owner and Interconnection Customer, then the System Operator

will review it and conduct appropriate studies, as needed, at the Interconnection Customer's cost, to determine the impact on the New England Transmission System based on the actual data submitted pursuant to this Article 24.3. The Interconnection Customer shall not begin Trial Operation until such studies are completed.

- 24.4 Information Supplementation.** Prior to the Commercial Operation Date, the Parties shall supplement their information submissions described above in this Article 24 with any and all “as-built” Elective Transmission Upgrade information and “as-tested” performance information that differs from the initial submissions or, alternatively, written confirmation that no such differences exist. The Interconnection Customer shall conduct tests on the Elective Transmission Upgrade as required by Good Utility Practice to verify proper operation of the Elective Transmission Upgrade's voltage regulation capability, and of other automatic controls for which the Elective Transmission Upgrade is reliant upon for acceptable performance, as described and requested by the System Operator. Documentation of the test results will be provided to the System Operator.

The Interconnection Customer shall provide the Interconnecting Transmission Owner and System Operator with any information changes due to proposed equipment replacement, repair, or adjustment. Interconnecting Transmission Owner shall provide the Interconnection Customer and System Operator with any information changes due to proposed equipment replacement, repair or adjustment in the directly connected substation or any adjacent Interconnecting Transmission Owner-owned substation that may affect the Interconnection Customer's Interconnection Facilities equipment ratings, protection or operating requirements. The Parties shall provide such information in accordance with Article 5.19 of this Agreement.

## **ARTICLE 25. INFORMATION ACCESS AND AUDIT RIGHTS**

- 25.1 Information Access.** Each Party (the “disclosing Party”) shall make available to the other Parties information that is in the possession of the disclosing Party and is necessary in order for the other Party(ies) to: (i) verify the costs incurred by the disclosing Party for which the other Party(ies) are responsible under this ETU IA; and (ii) carry out its obligations and responsibilities under this ETU IA. The Parties shall not use such information for purposes other than those set forth in this Article 25.1 and to enforce their rights under this ETU IA.



**25.2 Reporting of Non-Force Majeure Events.** Each Party (the “notifying Party”) shall notify the other Party(ies) when the notifying Party becomes aware of its inability to comply with the provisions of this ETU IA for a reason other than a Force Majeure event. The Parties agree to cooperate with each other and provide necessary information regarding such inability to comply, including the date, duration, reason for the inability to comply, and corrective actions taken or planned to be taken with respect to such inability to comply. Notwithstanding the foregoing, notification, cooperation or information provided under this Article shall not entitle the Party receiving such notification to allege a cause for anticipatory Breach of this ETU IA.

**25.3 Audit Rights.** Subject to the requirements of confidentiality under Article 22 of this ETU IA, each Party shall have the right, during normal business hours, and upon prior reasonable notice to the other Party(ies), to audit at its own expense the other Party’s(ies’) accounts and records pertaining to a Party’s performance or a Party’s satisfaction of obligations under this ETU IA. Such audit rights shall include audits of the other Party’s(ies’) costs, calculation of invoiced amounts, the efforts to allocate responsibility for the provision of reactive support to the New England Transmission System, the efforts to allocate responsibility for interruption or reduction of generation on the New England Transmission System, and each Party’s actions in an Emergency Condition. Any audit authorized by this Article shall be performed at the offices where such accounts and records are maintained and shall be limited to those portions of such accounts and records that relate to each Party’s performance and satisfaction of obligations under this ETU IA. Each Party shall keep such accounts and records for a period equivalent to the audit rights periods described in Article 25.4.

**25.4 Audit Rights Periods.**

**25.4.1 Audit Rights Period for Construction-Related Accounts and Records.** Accounts and records related to the design, engineering, procurement, and construction of Interconnecting Transmission Owner’s Interconnection Facilities and Network Upgrades shall be subject to audit for a period of twenty-four (24) months following Interconnecting Transmission Owner’s issuance of a final invoice in accordance with Article 12.2.

**25.4.2 Audit Rights Period for All Other Accounts and Records.** Accounts and records related to a Party's performance or satisfaction of all obligations under this ETU IA other than those described in Article 25.4.1 shall be subject to audit as follows: (i) for an audit relating to cost obligations, the applicable audit rights period shall be twenty-four (24) months after the auditing Party's receipt of an invoice giving rise to such cost obligations; and (ii) for an audit relating to all other obligations, the applicable audit rights period shall be twenty-four (24) months after the event for which the audit is sought.

**25.5 Audit Results.** If an audit by a Party determines that an overpayment or an underpayment has occurred, a notice of such overpayment or underpayment shall be given to the other Party(ies) together with those records from the audit which support such determination.

## **ARTICLE 26. SUBCONTRACTORS**

**26.1 General.** Nothing in this ETU IA shall prevent a Party from utilizing the services of any subcontractor as it deems appropriate to perform its obligations under this ETU IA; provided, however, that each Party shall require its subcontractors to comply with all applicable terms and conditions of this ETU IA in providing such services and each Party shall remain primarily liable to the other Party(ies) for the performance of such subcontractor.

**26.2 Responsibility of Principal.** The creation of any subcontract relationship shall not relieve the hiring Party of any of its obligations under this ETU IA. The hiring Party shall be fully responsible to the other Party(ies) for the acts or omissions of any subcontractor the hiring Party hires as if no subcontract had been made; provided, however, that in no event shall the Interconnecting Transmission Owner be liable for the actions or inactions of the Interconnection Customer or its subcontractors with respect to obligations of the Interconnection Customer under Article 5 of this ETU IA. Any applicable obligation imposed by this ETU IA upon the hiring Party shall be equally binding upon, and shall be construed as having application to, any subcontractor of such Party.

- 26.3 No Limitation by Insurance.** The obligations under this Article 26 will not be limited in any way by any limitation of subcontractor's insurance.

## **ARTICLE 27. DISPUTES**

- 27.1 Submission.** In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with this ETU IA or its performance, such Party (the "disputing Party") shall provide the other Party(ies) with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Party(ies). In the event the designated representatives are unable to resolve the claim or dispute through unassisted or assisted negotiations within thirty (30) Calendar Days of the other Party's(ies') receipt of the Notice of Dispute, such claim or dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such claim or dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law consistent with the terms of this ETU IA.
- 27.2 External Arbitration Procedures.** Any arbitration initiated under this ETU IA shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) Calendar Days of the submission of the dispute to arbitration, each Party shall choose one arbitrator who shall sit on a three-member arbitration panel. The arbitrator so chosen by the System Operator shall chair the arbitration panel. In either case, the arbitrators shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules") and any applicable Commission regulations or RTO rules; provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 27, the terms of this Article 27 shall prevail

- 27.3 Arbitration Decisions.** Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) Calendar Days of appointment and shall notify the Parties in writing of such decision and the reasons therefore. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this ETU IA and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act. The final decision of the arbitrator must also be filed with the Commission if it affects jurisdictional rates, terms and conditions of service, Interconnection Facilities, or Network Upgrades.
- 27.4 Costs.** Each Party shall be responsible for its own costs incurred during the arbitration process and for the following costs, if applicable: (1) the cost of the arbitrator chosen by the Party to sit on the three member panel; or (2) a pro rata share of the cost of a single arbitrator chosen by the Parties.

## **ARTICLE 28. REPRESENTATIONS, WARRANTIES AND COVENANTS**

- 28.1 General.** Each Party makes the following representations, warranties and covenants:
- 28.1.1 Good Standing.** Such Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable; that it is qualified to do business in the state or states in which the Elective Transmission Upgrade, Interconnection Facilities and Network Upgrades owned by such Party, as applicable, are located; and that it has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this ETU IA and carry out the transactions contemplated hereby and perform and carry out all covenants and obligations on its part to be performed under and pursuant to this ETU IA.
- 28.1.2 Authority.** Such Party has the right, power and authority to enter into this ETU IA, to become a Party hereto and to perform its obligations hereunder. This ETU IA is a legal,

valid and binding obligation of such Party, enforceable against such Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization or other similar laws affecting creditors' rights generally and by general equitable principles (regardless of whether enforceability is sought in a proceeding in equity or at law).

**28.1.3 No Conflict.** The execution, delivery and performance of this ETU IA does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of such Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon such Party or any of its assets.

**28.1.4 Consent and Approval.** Such Party has sought or obtained, or, in accordance with this ETU IA will seek or obtain, each consent, approval, authorization, order, or acceptance by any Governmental Authority in connection with the execution, delivery and performance of this ETU IA, and it will provide to any Governmental Authority notice of any actions under this ETU IA that are required by Applicable Laws and Regulations.

## **ARTICLE 29. [OMITTED]**

## **ARTICLE 30. MISCELLANEOUS**

**30.1 Binding Effect.** This ETU IA and the rights and obligations hereof shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

**30.2 Conflicts.** In the event of a conflict between the body of this ETU IA and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this ETU IA shall prevail and be deemed the final intent of the Parties.

**30.3 Rules of Interpretation.** This ETU IA, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this ETU IA, and reference to a

person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this ETU IA), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any Applicable Laws and Regulations means such Applicable Laws and Regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article of this ETU IA or such Appendix of this ETU IA, or such Section of the ETU IP or such Appendix of the ETU IP, as the case may be; (6) “hereunder”, “hereof”, “herein”, “hereto” and words of similar import shall be deemed references to this ETU IA as a whole and not to any particular Article or other provision hereof or thereof; (7) “including” (and with correlative meaning “include”) means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, “from” means “from and including”, “to” means “to but excluding” and “through” means “through and including”.

**30.4 Entire Agreement.** Except for the ISO New England Operating Documents, Applicable Reliability Standards, or successor documents, this ETU IA, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this ETU IA. Except for the ISO New England Operating Documents, Applicable Reliability Standards, any applicable tariffs, related facilities agreements, or successor documents, there are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party’s compliance with its obligations under this ETU IA.

**30.5 No Third Party Beneficiaries.** This ETU IA is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

**30.6 Waiver.** The failure of a Party to this ETU IA to insist, on any occasion, upon strict performance of any provision of this ETU IA will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by a Party of its rights with respect to this ETU IA shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this ETU IA. Termination or Default of this ETU IA for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Interconnecting Transmission Owner. Any waiver of this ETU IA shall, if requested, be provided in writing.

**30.7 Headings.** The descriptive headings of the various Articles of this ETU IA have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this ETU IA.

**30.8 Multiple Counterparts.** This ETU IA may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.

**30.9 Amendment.** The Parties may by mutual agreement amend this ETU IA by a written instrument duly executed by the Parties.

**30.10 Modification by the Parties.** The Parties may by mutual agreement amend the Appendices to this ETU IA by a written instrument duly executed by all of the Parties. Such amendment shall become effective and a part of this ETU IA upon satisfaction of all Applicable Laws and Regulations.

**30.11 Reservation of Rights.** Consistent with Section 11.3 of the ETU IP, Interconnecting Transmission Owner and System Operator shall have the right to make unilateral filings with the Commission to modify this ETU IA with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of

the Federal Power Act and the Commission's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with the Commission to modify this ETU IA pursuant to section 206 or any other applicable provision of the Federal Power Act and the Commission's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Parties and to participate fully in any proceeding before the Commission in which such modifications may be considered. In the event of disagreement on terms and conditions of the ETU IA related to the costs of upgrades to such Interconnecting Transmission Owner's transmission facilities, the anticipated schedule for the construction of such upgrades, any financial obligations of Interconnecting Transmission Owner, and any provisions related to physical impacts of the interconnection on Interconnecting Transmission Owner's transmission facilities or other assets, then the standard applicable under Section 205 of the Federal Power Act shall apply only to Interconnecting Transmission Owner's position on such terms and conditions. Nothing in this ETU IA shall limit the rights of the Parties or of the Commission under sections 205 or 206 of the Federal Power Act and the Commission's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

**30.12 No Partnership.** This ETU IA shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Parties.



**IN WITNESS WHEREOF**, the Parties have executed this ETU IA in triplicate originals, each of which shall constitute and be an original effective Agreement between the Parties.

**ISO New England Inc. (System Operator)**

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***[Insert Name of (Interconnecting Transmission Owner(s))***

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

***[Insert name of] (Interconnection Customer)***

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **APPENDICES TO ETU IA**

Appendix A	Interconnection Facilities, Network Upgrades and Distribution Upgrades
Appendix B	Milestones
Appendix C	Interconnection Details
Appendix D	Security Arrangements Details
Appendix E	Commercial Operation Date
Appendix F	Addresses for Delivery of Notices and Billings

## **APPENDIX A TO ETU IA**

### **Interconnection Facilities, Network Upgrades and Distribution Upgrades**

#### **1. Interconnection Facilities:**

##### **a. Point(s) of Interconnection**

List and identify each Point of Interconnection (*e.g.*, first, second, etc.)

The Point of Interconnection for the first terminal location shall be at the point where *[insert description of the first location internal to New England Control Area]*. See Appendix A-1, which drawing is attached hereto and made part hereof.

The Point of Interconnection for the second terminal location shall be at the point where *[insert description of the second location internal to New England Control Area or the location external to New England Control Area]*. See Appendix A-2, which drawing is attached hereto and made part hereof.

##### **b. Point(s) of Change of Ownership**

List and identify the Point of Change of Ownership for each Point of Interconnection (*e.g.*, first, second, etc.)

The Point of Change of Ownership for the first terminal location shall be at the point where *[insert description of the first location internal to New England Control Area]*. See Appendix A-1, which drawing is attached hereto and made part hereof.

The Point of Change of Ownership for the second terminal location shall be at the point where *[insert description of the second location internal to New England Control Area or the location external to New England Control Area]*. See Appendix A-2, which drawing is attached hereto and made part hereof.

**c. Metering**

List and identify the metering point for each Point of Interconnection (*e.g.*, first, second, etc.)

The metering point for the first terminal location shall be located at where [*insert description of the first location internal to New England Control Area*]. See Appendix A-1, which drawing is attached hereto and made part hereof.

The metering point for the second terminal location shall be located at where [*insert description of the second location internal to New England Control Area or the location external to New England Control Area*]. See Appendix A-2, which drawing is attached hereto and made part hereof.

**d. Interconnection Customer's Interconnection Facilities (including metering equipment).**

List and identify the Interconnection Customer's Interconnection Facilities for each Point of Interconnection (*e.g.*, first, second, etc.)

The Interconnection Customer's Interconnection Facilities for the first terminal location shall include [*insert Interconnection Customer's Interconnection Facilities*]. See Appendix A-1.

The Interconnection Customer's Interconnection Facilities for the second terminal location shall include [*insert Interconnection Customer's Interconnection Facilities for the second terminal location*]. See Appendix A-2.

**e. Interconnecting Transmission Owner's Interconnection Facilities (including metering equipment).**

List and identify the Interconnecting Transmission Owner's Interconnection Facilities for each Point of Interconnection (e.g., first, second, etc.)

The Interconnecting Transmission Owner's Interconnection Facilities for the first terminal location shall include [*insert Interconnecting Transmission Owner's Interconnection Facilities, including any Cluster Enabling Transmission Upgrades, for the first terminal location*]. See Appendix –1.

The Interconnecting Transmission Owner's Interconnection Facilities for the second terminal location shall include [*insert Interconnecting Transmission Owner's Interconnection Facilities for the second terminal location*]. See Appendix –2.

**2. Network Upgrades:**

- a. **Stand Alone Network Upgrades.** [*insert Stand Alone Network Upgrades associated with the first terminal location*]
- b. **Other Network Upgrades.** [*insert Other Network Upgrades, including any Cluster Enabling Transmission Upgrades, associated with the first terminal location*].
- c. **Stand Alone Network Upgrades.** [*insert Stand Alone Network Upgrades associated with the second terminal position if it is internal to the New England Control Area, list all Network Upgrades for terminal locations external to New England Control Area as Affected System Upgrades*].
- d. **Other Network Upgrades.** [*insert Other Network Upgrades associated with the second terminal position if it is internal to New England Control Area, list all Network Upgrades for terminal locations external to New England Control Area as Affected System Upgrades*].

**3. Distribution Upgrades.**

- a. [*insert Distribution Upgrades associated with the first terminal position*]

- b. *[insert Distribution Upgrades associated with the second terminal position if it is internal to New England Control Area, list all Distribution Upgrades for terminal locations external to New England Control Area as Affected System Upgrades]*

**4. Affected System Upgrades.**

- a. *[insert Affected System Upgrades associated with the first terminal position]*
- b. *[insert Affected System Upgrades associated with the second terminal position]*

**5. Contingency Upgrades List:**

**a. Long Lead Facility-Related Upgrades.**

The Interconnection Customer's Elective Transmission Upgrade is associated with a Long Lead Facility, in accordance with Section 3.2.3 of the ETU IP. Pursuant to Section 4.1.1 of the ETU IP, the Interconnection Customer shall be responsible for the following upgrades in the event that the Long Lead Facility achieves Commercial Operation and its counterparty obtains a Capacity Supply Obligation in accordance with Section III.13.1 of the Tariff:

*[insert]*

If the Interconnection Customer fails to cause these upgrades to be in-service prior to the commencement of the Long Lead Facility's associated counterparty's Capacity Commitment Period, the Interconnection Customer shall be deemed to be in Breach of this ETU IA in accordance with Article 17.1, and the System Operator will initiate all necessary steps to terminate this ETU IA, in accordance with Article 2.3.

- b. **Other Contingency Upgrades.** *[e.g., list of upgrades associated with higher queued Interconnection Requests and any other contingency upgrades that the Parties may deem necessary for the interconnection of the Elective Transmission Upgrade]*
- c. **Post-Forward Capacity Auction Re-study Upgrade Obligations.** *[insert any change in upgrade obligations that result from re-study conducted post receiving a Capacity Supply Obligation through a Forward Capacity Auction]*



## APPENDIX B TO ETU IA

### Milestones

- 1. Selected Option Pursuant to Article 5.1:** Interconnection Customer selects the *[insert]*.  
Options as described in Articles 5.1.*[insert]*, 5.1.*[insert]*, and 5.1.*[insert]* ] shall not apply to this ETU IA.
- 2. Milestones and Other Requirements for all Elective Transmission Upgrades:** The description and entries listed in the following table establish the required Milestones in accordance with the provisions of the ETU IP and this ETU IA. The referenced section of the ETU IP or article of the ETU IA should be reviewed by each Party to understand the requirements of each milestone.

Item No.	Milestone Description	Responsible Party	Date	ETU IP/ETU IA Reference
1	Provide evidence of continued Site Control to System Operator, or \$250,000 non-refundable deposit to the Interconnecting Transmission Owner	Interconnection Customer	Within 15 BD of final ETU IA receipt	§ 11.3.1.1 of ETU IP
2	Provide evidence of one or more milestones specified in § 11.3 of ETU IP to the System Operator and to the Interconnecting Transmission Owner	Interconnection Customer	Within 15 BD of final ETU IA receipt	§ 11.3.1.2 of ETU IP
3	Commit to a schedule for payment of upgrades to the	Interconnection Customer	Within 15 BD of final ETU IA receipt	§ 11.3.1.2 of ETU IP



	Interconnecting Transmission Owner			
4	Provide either (1) evidence of Major Permits to the System Operator and the Interconnecting Transmission Owner or (2) a refundable deposit to the Interconnecting Transmission Owner	Interconnection Customer	If (1) Within 15 BD of final ETU IA receipt or if (2) At time of ETU IA execution	§ 11.3.1.2 of ETU IP
5	Provide certificate of insurance to each Party	Interconnection Customer and Interconnecting Transmission Owner	Within 10 Calendar Days of execution of ETU IA	§ 18.3.9 of ETU IA
6A	Provide siting process approval schedule for the Elective Transmission Upgrade to System Operator and Interconnecting Transmission Owner	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
6B	Provide siting process approval schedule for Interconnection Customer's Interconnection Facilities at the first terminal location to System Operator and	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP

	Interconnecting Transmission Owner			
6C	Provide siting process approval schedule for Interconnection Customer's Interconnection Facilities at the second terminal location to System Operator and Interconnecting Transmission Owner	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
7A	Receive Governmental Authority approvals for a the Elective Transmission Upgrade facilities requiring regulatory approval	Interconnection Customer	If needed, as may be agreed to by the Parties	
7B	Receive Governmental Authority approvals for any facilities associated with the first terminal location requiring regulatory approval	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.1 of ETU IA
7C	Receive Governmental Authority approvals for any facilities associated with the second terminal location requiring regulatory approval	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.1 of ETU IA

8A	Obtain necessary real property rights and rights-of-way associated with the first terminal location for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.2 of ETU IA
8B	Obtain necessary real property rights and rights-of-way associated with the second terminal location for the construction of a discrete aspect of the Interconnecting Transmission Owner's Interconnection Facilities and Network Upgrades	Interconnection Customer and/or Interconnecting Transmission Owner	If needed, as may be agreed to by the Parties	§ 5.6.2 of ETU IA
9A	Provide to Interconnecting Transmission Owner associated with the first terminal position written authorization to proceed with design,	Interconnection Customer	As may be agreed to by the Parties	§ 5.6.3 of ETU IA

	equipment procurement and construction			
9B	Provide to owner associated with the second terminal position written authorization to proceed with design, equipment procurement and construction	Interconnection Customer	As may be agreed to by the Parties	§ 5.6.3 of ETU IA
10	Provide quarterly written progress reports	Interconnection Customer and Interconnecting Transmission Owner	15 Calendar Days after the end of each quarter beginning the quarter that includes earlier of the dates for Milestones 9A or 9B and ending when the entire Elective Transmission Upgrade and all required Interconnection Facilities and Network Upgrades are in place	§ 5.7 of ETU IA

11A	Provision of Security associated with the first terminal position to the Interconnecting Transmission Owner pursuant to Section 11.5 of ETU IA	Interconnection Customer	At least 30 Calendar Days prior to design, procurement and construction	§§ 5.5.3 and 5.6.4 of ETU IA
11B	Provision of Security associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner pursuant to Section 11.5 of ETU IA	Interconnection Customer	At least 30 Calendar Days prior to design, procurement and construction	§§ 5.5.3 and 5.6.4 of ETU IA
12A	Provision of Security Associated with Tax Liability associated with the first terminal position to Interconnecting Transmission Owner pursuant to Section 5.17.3 of ETU IA	Interconnection Customer	As may be agreed to by the Parties	§ 5.17.3 of ETU IA
12B	Provision of Security Associated with Tax Liability associated with the second terminal position, if it is internal to ISO-NE, to Interconnecting	Interconnection Customer	As may be agreed to by the Parties	§ 5.17.3 of ETU IA

	Transmission Owner pursuant to Section 5.17.3 of ETU IA			
13A	Commit to the ordering of long lead time material for Interconnection Facilities and Network Upgrades associated with the first terminal position	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
13B	Commit to the ordering of long lead time material for Interconnection Facilities and Network Upgrades associated with the second terminal position, if it is internal to ISO-NE	Interconnection Customer	As may be agreed to by the Parties	§ 7.5 of ETU IP
14A	Provide initial design, engineering and specification for the Elective Transmission Upgrade	Interconnection Customer	180 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
14B	Provide initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated	Interconnection Customer	180 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP

	with the first terminal position to the Interconnecting Transmission Owner			
C	Provide initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner	Interconnection Customer	180 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
15A	Provide comments on initial design, engineering and specification for the Elective Transmission Upgrade	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
15B	Provide comments on initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP

15C	Provide comments on initial design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
16A	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position to Interconnecting Transmission Owner(s)	Interconnection Customer	90 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
16B	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position to	Interconnection Customer	90 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP



	Interconnecting Transmission Owner(s)			
16C	Provide final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner	Interconnection Customer	90 Calendar Days prior to Trial Operation Date	§ 5.10.1 of ETU IA § 7.5 of ETU IP
17A	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the first terminal position	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
17B	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP

	Facilities associated with the first terminal position			
17C	Provide comments on final design, engineering and specification for Interconnection Customer's Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE	Interconnecting Transmission Owner	Within 30 Calendar Days of receipt	§ 5.10.1 of ETU IA § 7.5 of ETU IP
18A	Deliver to Transmission Owner "as built" drawings, information and documents regarding Interconnection Customer's Interconnection Facilities associated with the first terminal position	Interconnection Customer	Within 120 Calendar Days of Commercial Operation date	§ 5.10.3 of ETU IA
18B	Deliver to Transmission Owner "as built" drawings, information and documents regarding Interconnection Customer's	Interconnection Customer	Within 120 Calendar Days of Commercial Operation date	§ 5.10.3 of ETU IA

	Interconnection Facilities associated with the second terminal position, if it is internal to ISO-NE			
19A	Provide protective relay settings associated with the first terminal position to the Interconnecting Transmission Owner for coordination and verification	Interconnection Customer	At least 90 Calendar Days prior to Trial Operation Date	§§ 5.10.1 of ETU IA
19B	Provide protective relay settings associated with the second terminal position, if it is internal to ISO-NE, to the Interconnecting Transmission Owner for coordination and verification	Interconnection Customer	At least 90 Calendar Days prior to Trial Operation Date	§§ 5.10.1 of ETU IA
20A	Commencement of construction of Interconnection Facilities associated with the first terminal position	Interconnecting Transmission Owner(s)	As may be agreed to by the Parties	§ 5.6 of ETU IA
20B	Commencement of construction of Interconnection	Interconnecting Transmission Owner(s)	As may be agreed to by the Parties	§ 5.6 of ETU IA

	Facilities associated with the second terminal position, if it is internal to ISO-NE			
21	Submit updated data “as purchased”	Interconnection Customer	No later than 180 Calendar Days prior to Trial Operation Date	§ 24.3 of ETU IA
22A	In Service Date of first terminal position	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1 and 4.4.5 of ETU IP, § 5.1 of ETU IA
22B	In Service Date of second terminal position	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1 and 4.4.5 of ETU IP, § 5.1 of ETU IA
23	Trial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1, 4.4.4, 4.4.5, and 7.5 of ETU IP
24A	Submit supplemental and/or updated data – “as built/as-tested” associated with first terminal position	Interconnection Customer	Prior to Commercial Operation Date	§ 24.4 of ETU IA
24B	Submit supplemental and/or updated data – “as built/as-tested”	Interconnection Customer	Prior to Commercial Operation Date	§ 24.4 of ETU IA

	associated with second terminal position			
25	Commercial Operation Date	Interconnection Customer	Same as Interconnection Request unless subsequently modified	§ 3.3.1, 4.4.4, 4.4.5, and 7.5 of ETU IP
26A	Deliver to Interconnection Customer “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities associated with first terminal position	Interconnecting Transmission Owner	If requested, within 120 Calendar Days after Commercial Operation Date	§ 5.11 of ETU IA
26B	Deliver to Interconnection Customer “as built” drawings, information and documents regarding Interconnecting Transmission Owner’s Interconnection Facilities associated with the second terminal position	Interconnecting Transmission Owner	If requested, within 120 Calendar Days after Commercial Operation Date	§ 5.11 of ETU IA

27A	Provide Interconnection Customer final cost invoices associated with first terminal position	Interconnecting Transmission Owner	Within 6 months of completion of construction of Interconnecting Transmission Owner Interconnection Facilities and Network Upgrades	§ 12.2 of ETU IA
27B	Provide Interconnection Customer final cost invoices associated with the second terminal position, if it is internal to ISO-NE	Interconnecting Transmission Owner	Within 6 months of completion of construction of Interconnecting Transmission Owner Interconnection Facilities and Network Upgrades	§ 12.2 of ETU IA

### 3. Milestones Applicable Solely for CNI Interconnection Service and Long Lead Facility

**Treatment.** In addition to the Milestones above, the following Milestones apply to Interconnection Customers requesting CNI Interconnection Service and/or Long Lead Facility Treatment:

Item No.	Milestone Description	Responsible Party	Date	ETU IP/ETU IA Reference
----------	-----------------------	-------------------	------	-------------------------

1	If Long Lead Facility, all dates by which Critical Path Schedule upgrades will be submitted to System Operator (end date for New Capacity Show of Interest Submission)	Interconnection Customer		§ 3.2.3 of ETU IP
2	If Long Lead Facility, dates by which Long Lead Facility Deposits will be provided to System Operator (each deadline for which New Generating Capacity Resource would be required to provide financial assurance under § III.13.1.9 of the Tariff)	Interconnection Customer		§ 3.2.3 of ETU IP
3	If Long Lead Facility, Capacity Commitment Period (not to exceed the Commercial Operation Date)	Interconnection Customer		§ 1 and 3.2 of ETU IP
4	Counterparty to submit necessary requests for participation in the Forward Capacity Auction associated with the Elective Transmission Upgrade's requested Commercial Operation Date, in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of ETU IP
5	Participate in a CNR Group Study	Interconnection Customer		§ 3.2.1.3 of ETU IP
6	Counterparty to qualify and receive a Capacity Supply Obligation in accordance with Section III.13 of the Tariff	Interconnection Customer		§ 3.2.1.3 of ETU IP
7	Complete a re-study of the applicable Interconnection Study to determine the cost responsibility for facilities and upgrades necessary to accommodate the Interconnection Request based on the	System Operator		§ 3.2.1.3 of ETU IP

	results of the Forward Capacity Auction or Reconfiguration Auction or bilateral transaction through which the Interconnection Customer's counterparty received a Capacity Supply Obligation			
--	---	--	--	--



## **APPENDIX C TO ETU IA**

### **Interconnection Details**

#### **1. Description of Interconnection:**

This Interconnection Agreement is for an *(insert either Internal ETU or External ETU description from Article 1 of Appendix I)*

The ETU consists of *(insert description from Article 2 of Appendix I)*:

The External Elective Transmission Upgrade that is controllable Merchant Transmission Facility or Other Transmission Facility shall receive *(enter N/A for other ETUs)*:

Network Import Interconnection Service solely for the NI Capability of *[insert amount]* MWs.

Capacity Network Import Interconnection Service for: (i) the NI Capability of *[insert amount]* MWs; and (ii) the CNI Capability of *[insert amount]* MWs.

#### **2. Detailed Description of the Elective Transmission Upgrade:**

*[Insert any other description relating to the Elective Transmission Upgrade, including updates to all the technical data included on Attachment A to Appendix I.]*

#### **3. Other Description of Interconnection Plan and Facilities associated with the Elective Transmission Upgrade:**

#### **4. Other Description of Interconnection Plan and Facilities associated with the first interconnection location:**

**5. Other Description of Interconnection Plan and Facilities associated with the second interconnection location:**

## **APPENDIX D TO ETU IA**

### **Security Arrangements Details**

Infrastructure security of the New England Transmission System equipment and operations and control hardware and software is essential to ensure day-to-day New England Transmission System reliability and operational security. The Commission will expect System Operator, Interconnecting Transmission Owners, market participants, and Interconnection Customers interconnected to the New England Transmission System to comply with the recommendations offered by the Critical Infrastructure Protection Committee and, eventually, best practice recommendations from NERC. All public utilities will be expected to meet basic standards for system infrastructure and operational security, including physical, operational, and cyber-security practices.

**APPENDIX E TO ETU IA**  
**Commercial Operation Date**

This Appendix E is a part of the ETU IA between System Operator Interconnecting, Transmission Owner and Interconnection Customer.

[Date]

[Interconnecting Transmission Owner; Address]  
[to be supplied]

Transmission Strategy & Services  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Re: \_\_\_\_\_ Elective Transmission Upgrade

Dear \_\_\_\_\_:

On [Date] [Interconnection Customer] has completed Trial Operation of [Elective Transmission Upgrade]. This letter confirms that [Interconnection Customer] commenced commercial operation of [Elective Transmission Upgrade], effective as of [Date plus one day].

Thank you.

[Signature]  
[Interconnection Customer Representative]

## **APPENDIX F TO ETU IA**

### **Addresses for Delivery of Notices and Billings Notices:**

System Operator:

Transmission Strategy & Services  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:  
Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

### **Billings and Payments:**

System Operator:

Transmission Strategy & Services  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

With copy to:

Billing Department  
ISO New England Inc.  
One Sullivan Road  
Holyoke, MA 01040-2841

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

**Alternative Forms of Delivery of Notices (telephone, facsimile or email):**

System Operator:

Facsimile: (413) 540-4203

E-mail: [geninterconn@iso-ne.com](mailto:geninterconn@iso-ne.com)

With copy to:

Facsimile: (413) 535-4024

E-mail: [billingdept@iso-ne.com](mailto:billingdept@iso-ne.com)

Interconnecting Transmission Owner:

*[To be supplied.]*

Interconnection Customer:

*[To be supplied.]*

DUNS Numbers:

Interconnection Customer: [To be supplied]

Interconnecting Transmission Owner: [To be supplied]

## **New England Governors, State Utility Regulators and Related Agencies\***

### **Connecticut**

The Honorable Ned Lamont  
Office of the Governor  
State Capitol  
210 Capitol Ave.  
Hartford, CT 06106  
[bob.clark@ct.gov](mailto:bob.clark@ct.gov)

Connecticut Attorney General's Office  
165 Capitol Avenue  
Hartford, CT 06106  
[John.wright@ct.gov](mailto:John.wright@ct.gov)  
[Lauren.bidra@ct.gov](mailto:Lauren.bidra@ct.gov)

Connecticut Department of Energy and  
Environmental Protection  
79 Elm Street  
Hartford, CT 06106  
[Eric.annes@ct.gov](mailto:Eric.annes@ct.gov)  
[Robert.snook@ct.gov](mailto:Robert.snook@ct.gov)

Connecticut Public Utilities Regulatory Authority  
10 Franklin Square  
New Britain, CT 06051-2605  
[steven.cadwallader@ct.gov](mailto:steven.cadwallader@ct.gov)  
[robert.luysterborghs@ct.gov](mailto:robert.luysterborghs@ct.gov)  
[Seth.Hollander@ct.gov](mailto:Seth.Hollander@ct.gov)  
[Robert.Marconi@ct.gov](mailto:Robert.Marconi@ct.gov)

### **Maine**

The Honorable Janet Mills  
One State House Station  
Office of the Governor  
Augusta, ME 04333-0001  
[Jeremy.kennedy@maine.gov](mailto:Jeremy.kennedy@maine.gov)  
[Elise.baldacci@maine.gov](mailto:Elise.baldacci@maine.gov)

Maine Public Utilities Commission  
18 State House Station  
Augusta, ME 04333-0018  
[Maine.puc@maine.gov](mailto:Maine.puc@maine.gov)

### **Massachusetts**

The Honorable Charles Baker  
Office of the Governor  
State House  
Boston, MA 02133

Massachusetts Attorney General's Office

One Ashburton Place  
Boston, MA 02108  
[rebecca.tepper@state.ma.us](mailto:rebecca.tepper@state.ma.us)

Massachusetts Department of Energy  
Resources  
100 Cambridge Street, Suite 1020  
Boston, MA 02114  
[Robert.hoaglund@mass.gov](mailto:Robert.hoaglund@mass.gov)  
[ben.dobbs@state.ma.us](mailto:ben.dobbs@state.ma.us)

Massachusetts Department of Public Utilities  
One South Station  
Boston, MA 02110  
[Nancy.Stevens@state.ma.us](mailto:Nancy.Stevens@state.ma.us)  
[morgane.treanton@state.ma.us](mailto:morgane.treanton@state.ma.us)  
[William.J.Anderson2@mass.gov](mailto:William.J.Anderson2@mass.gov)  
[dpu.electricsupply@mass.gov](mailto:dpu.electricsupply@mass.gov)

### **New Hampshire**

The Honorable Chris Sununu  
Office of the Governor  
26 Capital Street  
Concord NH 03301

New Hampshire Department of Energy  
21 South Fruit Street, Ste 10  
Concord, NH 03301  
[Jared.S.Chicoine@energy.nh.gov](mailto:Jared.S.Chicoine@energy.nh.gov)  
[Christopher.j.ellmsjr@energy.nh.gov](mailto:Christopher.j.ellmsjr@energy.nh.gov)  
[Thomas.C.Frantz@energy.nh.gov](mailto:Thomas.C.Frantz@energy.nh.gov)  
[Karen.P.Cramton@energy.nh.gov](mailto:Karen.P.Cramton@energy.nh.gov)  
[Amanda.O.Noonan@energy.nh.gov](mailto:Amanda.O.Noonan@energy.nh.gov)  
[joshua.w.elliott@energy.nh.gov](mailto:joshua.w.elliott@energy.nh.gov)

New Hampshire Public Utilities Commission  
21 South Fruit Street, Ste. 10  
Concord, NH 03301-2429  
[david.j.shulock@energy.nh.gov](mailto:david.j.shulock@energy.nh.gov)  
[RegionalEnergy@puc.nh.gov](mailto:RegionalEnergy@puc.nh.gov)

### **Rhode Island**

The Honorable Daniel McKee  
Office of the Governor  
82 Smith Street  
Providence, RI 02903  
[Rosemary.powers@governor.ri.gov](mailto:Rosemary.powers@governor.ri.gov)

## **New England Governors, State Utility Regulators and Related Agencies\***

Rhode Island Office of Energy Resources  
One Capitol Hill  
Providence, RI 02908  
[christopher.kearns@energy.ri.gov](mailto:christopher.kearns@energy.ri.gov)  
[nicholas.ucci@energy.ri.gov](mailto:nicholas.ucci@energy.ri.gov)

Rhode Island Public Utilities Commission  
89 Jefferson Blvd.  
Warwick, RI 02888  
[ronald.gerwatowski@puc.ri.gov](mailto:ronald.gerwatowski@puc.ri.gov)  
[todd.bianco@puc.ri.gov](mailto:todd.bianco@puc.ri.gov)

### **Vermont**

The Honorable Phil Scott  
Office of the Governor  
109 State Street, Pavilion  
Montpelier, VT 05609  
[jason.gibbs@vermont.gov](mailto:jason.gibbs@vermont.gov)

Vermont Public Utility Commission  
112 State Street  
Montpelier, VT 05620-2701  
[mary-jo.krolewski@vermont.gov](mailto:mary-jo.krolewski@vermont.gov)  
[Margaret.cheney@vermont.gov](mailto:Margaret.cheney@vermont.gov)

Vermont Department of Public Service  
112 State Street, Drawer 20  
Montpelier, VT 05620-2601  
[bill.jordan@vermont.gov](mailto:bill.jordan@vermont.gov)  
[june.tierney@vermont.gov](mailto:june.tierney@vermont.gov)

### **New England Governors, Utility Regulatory and Related Agencies**

Jay Lucey  
Coalition of Northeastern Governors  
400 North Capitol Street, NW, Suite 370  
Washington, DC 20001  
[coneg@sso.org](mailto:coneg@sso.org)

Heather Hunt, Executive Director  
New England States Committee on Electricity  
424 Main Street  
Osterville, MA 02655  
[HeatherHunt@nescoe.com](mailto:HeatherHunt@nescoe.com)  
[JasonMarshall@nescoe.com](mailto:JasonMarshall@nescoe.com)  
[JeffBentz@nescoe.com](mailto:JeffBentz@nescoe.com)

Meredith Hatfield, Executive Director  
New England Conference of Public Utilities  
Commissioners  
72 N. Main Street  
Concord, NH 03301  
[mhatfield@necpuc.org](mailto:mhatfield@necpuc.org)

Matthew Nelson, President  
New England Conference of Public Utilities  
Commissioners  
One South Station  
Boston, MA 02110  
[matthew.nelson@mass.gov](mailto:matthew.nelson@mass.gov)