



January 27, 2023

**VIA ELECTRONIC FILING**

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

**Re: *Improvements to Economic Study Process in Attachment K of Open Access Transmission Tariff; Docket No. ER23-\_\_\_\_-000***

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act,<sup>1</sup> ISO New England Inc. (the “ISO” or “ISO-NE”) joined by the New England Power Pool (“NEPOOL”) Participants Committee<sup>2</sup> (together, the “Filing Parties”),<sup>3</sup> hereby submits proposed Tariff revisions to improve the Economic Study process set forth in Attachment K of the OATT. The proposed revisions, collectively referred to as “Economic Study Revisions,” require that the ISO conduct defined scenario-based studies designed to: (1) identify market efficiency issues, and as applicable, market efficiency needs on the Pool Transmission Facilities (“PTF”)<sup>4</sup> portion of the New England Transmission System as part of the Economic Study process;<sup>5</sup> (2) provide the New England region

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

<sup>2</sup> Capitalized terms used but not defined in this filing are intended to have the meaning given to such terms in the ISO New England Inc. Transmission, Markets and Services Tariff (“Tariff”). Section II of the Tariff is the Open Access Transmission Tariff (“OATT”).

<sup>3</sup> Under New England's Regional Transmission Organization arrangements and, except as noted below, the rights to make this filing of changes to the OATT under Section 205 of the Federal Power Act are the ISO's. NEPOOL, which pursuant to the Participants Agreement provides the sole market participant stakeholder process for advisory voting on ISO matters, supported the changes reflected in this filing and accordingly, joins in this Section 205 filing.

<sup>4</sup> See Tariff at Section I.2.2 (defining PTF as “the transmission facilities owned by PTOs which meet the criteria specified in Section II.49 of the OATT”); see also OATT at Section II.49.

<sup>5</sup> See Section 3.09(a) of the Transmission Operating Agreement between the PTOs and the ISO (“The ISO shall perform all of its responsibilities pursuant to the ISO Planning Process set forth in the ISO OATT. Each PTO shall engage in planning for its Local Area Facilities in a manner that is consistent with applicable NERC/NPCC Requirements, Good Utility Practice and the ISO OATT.”); see also Attachment K of OATT at Section 6.1 (“The ISO

more insight into system trends and consistent analysis; and (3) facilitate comparison across Economic Study cycles, all of which can inform future decisions in transmission investment. The Economic Study Revisions are supported by the testimony of Mr. Steven Judd, Manager, Resource Adequacy and Accreditation, which is sponsored solely by the ISO (“Judd Testimony”).<sup>6</sup>

The Economic Study Revisions build off the ISO’s current Federal Energy Regulatory Commission (“Commission”)-approved Economic Studies process, and is the first phase of a bifurcated effort to improve the process. The next phase of the effort, which is currently underway with the goal of submitting a Tariff filing by the second quarter of 2024, will review and update the factors and metrics used to identify market efficiency issues and needs of the power system, which continues to evolve. As described below, the elements of the Economic Study Revisions meet the requirements and planning principles of Order No. 890,<sup>7</sup> Order No. 1000,<sup>8</sup> and are just and reasonable.<sup>9</sup> The Filing Parties respectfully request that the Tariff revisions proposed in this filing become effective on March 31, 2023, a date that is 60 days after the date of this filing.

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

The ISO is the independent, private, non-profit entity that serves as the Regional Transmission Organization (“RTO”) for New England. The ISO operates the New England bulk power system and administers New England’s organized wholesale electricity market pursuant to the Tariff and the Transmission Operating Agreement (“TOA”) with the New England Participating Transmission Owners (“PTO”). In its capacity as an RTO, the ISO has the responsibility to protect the short-term reliability of the New England Control Area and to plan and operate the system according to reliability standards established by the ISO, the Northeast

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shall conduct the regional system planning process for the PTF in coordination with the transmission-owning entities in, or other entities interconnected to, the New England Transmission System consistent with the rights and obligations defined in the ISO OATT, applicable transmission operating agreements or protocols, and/or this Attachment.”); *see also id.* at Section 6.2.

<sup>6</sup> The Judd Testimony is Attachment 3 to this transmittal letter.

<sup>7</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>8</sup> *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, 136 FERC ¶ 61,051 (2011) (“Order No. 1000”). *Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities*, Order No. 1000, 136 FERC ¶ 61,051 (2011), *order on reh’g & clarification*, Order No. 1000-A, 139 FERC ¶ 61,132, *order on reh’g & clarification*, Order No. 1000-B, 141 FERC ¶ 61,044 (2012), *aff’d sub nom. S.C. Pub. Serv. Auth. v. FERC*, 762 F.3d 41 (D.C. Cir. 2014).

<sup>9</sup> *See infra* at Section V.

Power Coordinating Council, Inc. (“NPCC”) and the North American Electric Reliability Corporation (“NERC”).

NEPOOL is a voluntary association organized in 1971 pursuant to the New England Power Pool Agreement, and it has grown to include more than 530 members. The participants include all of the electric utilities rendering or receiving service under the 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>10</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 matters and the selection of ISO Board members, except for input from state regulatory authorities and as otherwise may be provided in the Tariff, TOA and the Market Participant Services Agreement included in the Tariff.”

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<sup>10</sup> *ISO New England Inc.*, 109 FERC ¶ 61,147 (2004).

\*Persons designated for service<sup>11</sup>

## II. STANDARD OF REVIEW

The Economic Study Revisions are submitted pursuant to Section 205 of the Federal Power Act, which “gives a utility the right to file rates and terms for services rendered with its assets.”<sup>12</sup> Under Section 205, the Commission “plays ‘an essentially passive and reactive’ role”<sup>13</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>14</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>15</sup> The Economic Study Revisions filed herein “need not be the only reasonable methodology, or even the most accurate.”<sup>16</sup> As a result, even if an intervenor or the Commission develops an alternate proposal, the Commission must accept the Tariff revisions proposed in this Section 205 filing if the revisions are just and reasonable.<sup>17</sup>

One of the revisions<sup>18</sup> to the Economic Study process proposed herein is being submitted as a variation to tariff revisions adopted under Order No. 890 under the “consistent with or superior to” standard of review. In Order No. 890, the Commission required RTOs and independent system operators (“ISOs”) to demonstrate that any variations from the tariff revisions adopted in the order satisfy the “consistent with or superior to” standard.<sup>19</sup>

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<sup>11</sup> Due to the joint nature of this filing, 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>12</sup> *Atlantic City Elec. Co. v. FERC*, 295 F.3d 1, 9 (D.C. Cir. 2002).

<sup>13</sup> *Id.* at 10 (quoting *City of Winnfield v. FERC*, 744 F.2d 871, 876 (D.C. Cir. 1984)).

<sup>14</sup> *Id.* at 9.

<sup>15</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>16</sup> *Oxy USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995) (citing *Cities of Bethany* at 1136).

<sup>17</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).

<sup>18</sup> *See infra* at Section V.

<sup>19</sup> Order No. 890 at P 160 (declining requests by commenters to adopt an “independent entity variation” or a “regional variation” standard for variations proposed by RTOs and ISOs and, instead, requiring RTOs and ISOs to apply the “consistent with or superior to” standard).

### III. BACKGROUND

In 2007, the Commission issued Order No. 890 to, among other things, address the lack of specificity regarding how customers and other stakeholders should be treated in the transmission planning process.<sup>20</sup> The order required transmission providers to develop and file a transmission planning process that satisfied nine planning principles,<sup>21</sup> including an economic planning studies principle, and to clearly describe that process in an Attachment K to their OATTs.<sup>22</sup> Under the planning principle for economic planning studies, “[S]takeholders [must] be given the right to request a defined number of high priority studies annually . . . to address congestion and/or integration of new resources or loads. The intent of this approach is to allow customers, not the transmission provider, to identify those portions of the transmission system where they have encountered transmission problems due to congestion or whether they believe upgrades and other investments may be necessary to reduce congestion and to integrate new resources . . . The cost of the defined number of high priority studies would be recovered as part of the overall *pro forma* OATT cost of service.”<sup>23</sup>

The Commission provided flexibility in satisfying this principle. With respect to RTOs and independent system operators (“ISOs”), the Commission recognized that they may already have Commission-approved transmission planning processes, and emphasized that its reform is not intended to “reopen prior approvals, but rather to ensure that the transmission planning process utilized by each RTO and ISO is consistent with or superior to the planning process adopted” in Order No. 890.<sup>24</sup> Specific to the economic planning study principle, the Commission also “applaud[ed] [the] efforts” of RTOs and ISOs that had taken increasingly progressive steps to identify investments that could reduce congestion or integrate new resources and reiterated that, “[e]ach RTO or ISO must show that its planning process is consistent with or superior to the requirements of the Final Rule in all respects.”<sup>25</sup> Transmission providers’ responses to Order No. 890 varied.<sup>26</sup>

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<sup>20</sup> Order No. 890 at P 61.

<sup>21</sup> The nine principles were coordination, openness, transparency, information exchange, comparability, dispute resolution, regional participation, economic planning studies, and cost allocation. *See* Order No. 890 at PP 444-561.

<sup>22</sup> Order No. 890 at P 444.

<sup>23</sup> *Id.* at P 547.

<sup>24</sup> *Id.* at P 439.

<sup>25</sup> *Id.* at P 545.

<sup>26</sup> *See, e.g., New York Independent System Operator, Inc.*, Order on Compliance Filing, 125 FERC ¶ 61,068, at P 74-75, 77 (Oct. 18, 2008) (accepting economic planning studies process that allows New York Independent System Operator, Inc. (“NYISO”) to select economic planning studies most beneficial to market participants with input from stakeholders; “NYISO, in conjunction with the ESP Working Group, will develop criteria for the study selection and grouping of the three congestion and resource integration studies that comprise each CARIS, as well as for setting the associated timelines for completion of the selected studies. NYISO will also develop a process by which individual

On December 7, 2007, the ISO submitted a compliance filing in response to Order No. 890 that moved the substance of the existing regional system planning process into Attachment K of the OATT and included core improvements to the existing process to, among other things, add provisions for Economic Studies, including a process for selecting and prioritizing requests for such studies.<sup>27</sup> In a May 15, 2008 order, the Commission accepted the ISO's compliance filing upon finding that the ISO's transmission planning process, with certain modifications directed on further compliance, "complies with each of the nine principles and other planning requirements adopted in Order No. 890."<sup>28</sup> Specific to Economic Studies, the Commission found that the ISO's existing planning process met the requirements of Order No. 890.<sup>29</sup>

On August 11, 2011, the Commission issued Order No. 1000. Among other requirements, Order No. 1000 required each public utility transmission provider to: (1) participate in a regional transmission planning process that complies with the nine identified planning principles of Order No. 890, including the Economic Study process, and that, in consultation with stakeholders, results in the development of a regional transmission plan; and (2) institute a number of reforms that seek to ensure that non-incumbent transmission developers have an opportunity to participate in the transmission development process.<sup>30</sup>

On October 25, 2012, the ISO submitted a compliance filing in response to Order No. 1000 demonstrating that the ISO's Economic Study process continues to satisfy the nine identified planning principles of Order No. 890 and adding a competitive solutions process to its regional system planning process that allows both incumbent and non-incumbent transmission owners to

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customers can request and fund additional congestions and resource integration studies not selected for the CARIS."); *see also New York Independent System Operator, Inc.*, Order No. 890 Transmission Planning Compliance Filing, Docket No. OA08-52-000, at p. 28 (filed Dec. 7, 2007) ("... [NYISO's economic planning studies] proposal would require the NYISO to select studies most beneficial to Market Participants as inputs into the [Congestion Assessment and Resource Integration Study ("CARIS")]. The NYISO is proposing to conduct three such economic studies in each CARIS cycle the costs of which would be collected through the NYISO's Rate Schedule I charge. These studies will be decided upon through the stakeholder process, and all reasonable efforts will be made to aggregate study requests so that the three studies will cover the principal transmission congestion analyses that are of concern to the NYISO's Market Participants."); *see also New York Independent System Operator, Inc.*, Order Accepting Tariff Revisions, 175 FERC ¶ 61,010 at PP 1, 3, 7 (Apr. 9, 2021) (accepting revisions to a biennial system-wide congestion study that is initiated by NYISO as part of its economic planning study process).

<sup>27</sup> *See ISO New England Inc.*, Amendments to the ISO New England Inc. Transmission, Markets and Services Tariff in Compliance with Order No. 890, Docket No. OA08-58-000, at p. 14 (filed Dec. 7, 2007) ("Order No. 890 Compliance Filing").

<sup>28</sup> *ISO New England Inc.*, Order on Compliance Filing, 123 FERC ¶ 61,161, at P 12 (May 15, 2008) ("ISO 890 Order").

<sup>29</sup> ISO 890 Order at PP 82-83.

<sup>30</sup> Order No. 1000 at PP 6, 11, 146; *see also* ISO 1000 Order at P 128.

participate in the ISO's regional system planning process.<sup>31</sup> Under the competitive solutions process, incumbent and non-incumbent transmission owners' may submit competing proposals to develop and ultimately own transmission solutions to address identified market efficiency needs (*i.e.*, Market Efficiency Transmission Upgrades). The Commission issued an order accepting the ISO's Economic Study process, finding the process "...fully complies with the...economic studies transmission planning principles [in Order No. 890]", and the competitive solutions process for Market Efficiency Transmission Upgrades on, respectively, May 17, 2013,<sup>32</sup> and March 19, 2015.<sup>33</sup>

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

While the current Economic Study framework provides useful study results for informational purposes, it does not allow for the consistent evaluation of market efficiency issues on system wide basis, identification of systems trends between Economic Study cycles, or incorporation of lessons learned from previous Economic Studies into subsequent Economic Studies. This section provides a description of the current Economic Study process, the Economic Studies completed to date, the Economic Study framework shortcomings that the completed studies have brought to light, and the ISO's proposal to address the framework shortcomings (*i.e.*, the Economic Study Revisions).

##### **A. Description of Current Economic Study Process**

Presently, the Economic Study provisions of the ISO-NE OATT allow stakeholders to request—and collectively identify, and prioritize in consultation with the ISO—Economic Studies for ISO-NE to conduct in a given year to evaluate and, as applicable, address market inefficiencies, congestion constraints, or integrate new resources or load.<sup>34</sup> Specifically, the ISO's stakeholders may request the ISO to undertake assessments of the PTF portion of the New England Transmission System on a system wide or specific area basis to examine situations where potential regulated transmission solutions or market responses or investments could result in: (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of the OATT; (ii) reduced congestion; or (iii) the integration of new resources or

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<sup>31</sup> See *ISO New England Inc.*, Order No. 1000 Compliance Filing of ISO New England Inc. and the Participating Transmission Owners Administrative Committee, Docket Nos. ER13-193-000, *et al.*, at p. 14 (filed Oct. 25, 2012) ("Order No. 890 Compliance Filing").

<sup>32</sup> *ISO New England Inc.*, Order on Compliance Filings, 143 FERC ¶ 61,150 at, P 45 (May 17, 2013) ("ISO 1000 Order I").

<sup>33</sup> *ISO New England Inc.*, Order on Rehearing and Compliance, 150 FERC ¶ 61,209 at, PP 287-289 (Mar. 19, 2015) ("ISO 1000 Order II").

<sup>34</sup> Attachment K of the OATT at Section 4.1(b).

loads, or both, on an aggregate or regional basis.<sup>35</sup> The results of the Economic Studies allow stakeholders to assess the impact of proposed system expansions or resource alternatives for either informational purposes or for the ISO to identify and address market efficiency needs with a Market Efficiency Transmission Upgrade that will be included in the Regional System Plan and RSP Project List. The current Economic Study provisions also allow, and have been used, for study of future grid scenarios, including a system with supply and demand that is in accord with public policy requirements.<sup>36</sup>

To initiate the Economic Study process, stakeholders must submit their requests for Economic Studies to be conducted by ISO-NE by April 1 each year.<sup>37</sup> The ISO may also propose its own Economic Studies thereafter.<sup>38</sup> If neither the stakeholders nor ISO propose an Economic Study in a given year, the process ends and no Economic Study will be initiated that year. However, if an Economic Study is proposed by either the stakeholders or ISO, the ISO develops a rough work scope and cost estimate for all requested Economic Studies and prepares preliminary prioritization on the basis of ISO-NE's perceived inter-area and regional benefits.<sup>39</sup> ISO-NE then submits this information to the Planning Advisory Committee for its consideration by no later than May 1 and holds a meeting of the Planning Advisory Committee no later than June 1 to discuss, identify, and prioritize the proposed Economic Studies.<sup>40</sup> The ISO may perform up to two Economic Studies in a given year taking into consideration their impact on the ISO budget and other priorities.<sup>41</sup> If a Public Policy Transmission Study will not be concurrently performed, the ISO may consider performing up to three Economic Studies.<sup>42</sup>

If a Needs Assessment is requested or warranted as part of an Economic Study, ISO-NE conducts a market efficiency Needs Assessment to identify potential market efficiency needs.<sup>43</sup> If a Needs Assessment identifies a market efficiency need, the ISO conducts a two-stage competitive solution process pursuant to Section 4.3 of Attachment K to identify Market Efficiency

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<sup>35</sup> Attachment K of the OATT at Section 4.1(b).

<sup>36</sup> For example, the existing Economic Study provisions were used by NEPOOL in 2021 to request an extensive Future Grid Reliability Study. In July of 2022 the ISO published the final Phase I report on this study. See [https://www.iso-ne.com/static-assets/documents/2022/07/2021\\_economic\\_study\\_future\\_grid\\_reliability\\_study\\_phase\\_1\\_report.pdf](https://www.iso-ne.com/static-assets/documents/2022/07/2021_economic_study_future_grid_reliability_study_phase_1_report.pdf). See also [https://www.iso-ne.com/static-assets/documents/2022/09/future\\_grid\\_reliability\\_study\\_summary\\_03.pdf](https://www.iso-ne.com/static-assets/documents/2022/09/future_grid_reliability_study_summary_03.pdf); see also Judd Testimony at pp. 9-10.

<sup>37</sup> Attachment K of the OATT at Section 4.1(b)(i).

<sup>38</sup> *Id.* at Section 4.1(b)(ii).

<sup>39</sup> *Id.* at Section 4.1(b)(ii).

<sup>40</sup> *Id.* at Section 4.1(b)(iii)-(iv).

<sup>41</sup> *Id.* at Section 4.1(b)(iv).

<sup>42</sup> *Id.* at Section 4.1(b)(iv); see also Judd Testimony at p. 10.

<sup>43</sup> Attachment K of the OATT at Section 4.1(b).



Transmission Upgrades.<sup>44</sup> The standard used to identify a Market Efficiency Transmission Upgrade is whether the upgrade will primarily provide a net reduction in total production cost to supply system load based on the factors specified in Attachment N of the OATT.<sup>45</sup> Attachment N also allows for the consideration of additional data provided by stakeholders (e.g., congestion costs) that ISO-NE, in coordination with the New England stakeholders, may consider to illustrate the net cost to load with and without the transmission upgrade, such as locational installed capacity, congestion costs, and impacts on bilateral prices for electricity.<sup>46</sup> A Market Efficiency Transmission Upgrade ultimately selected to address a market efficiency need is included in the Regional System Plan.<sup>47</sup>

The ISO's costs to perform Economic Studies are recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff as part of the OATT-related services.<sup>48</sup> The ISO may also perform additional Economic Studies requested by one or more stakeholders beyond the two to three Economic Studies selected by ISO-NE and Planning Advisory Committee pursuant to Section 4.1(b)(iv) of Attachment K. However, the stakeholders requesting these additional studies are responsible for paying for the costs of such studies.<sup>49</sup>

## **B. Economic Studies Completed to Date and Shortcomings in the Process**

Since the adoption of the Economic Study process approximately fifteen years ago,<sup>50</sup> the ISO has conducted fifteen Economic Studies, which are described below:

1. a study initiated in 2008 and completed in 2009 to “test” future resource additions and the effect of transmission constraints in a context similar to the “what-if” framework of the 2007 Scenario Analysis;<sup>51</sup>
2. a study initiated in 2009 and completed in 2010 that “...evaluated a range of generic sources of renewable energy available to New England, conceptual transmission configurations to integrate these resources into the power grid, and potential

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<sup>44</sup> *Id.* at Section 4.1(i); *see also* Attachment K of the OATT at Section 4.3.

<sup>45</sup> Attachment K of the OATT at Section 4.1(b); *see also* Attachment N of the OATT at Section II(B).

<sup>46</sup> Attachment N of the OATT at Section II(B)(2).

<sup>47</sup> Attachment K of the OATT at Section 4.3(j); *see also* Judd Testimony at pp. 10-11.

<sup>48</sup> Attachment K of the OATT at Section 4.1(b)(iv); *see also* 2008 Order on Compliance Filing at P 82.

<sup>49</sup> Attachment K of the OATT at Section 4.1(b); *see also* Judd Testimony at p. 11.

<sup>50</sup> *See* ISO 890 Order at P 12 (conditionally accepting ISO-NE's Attachment K, including the Economic Study process, to become effective December 7, 2007).

<sup>51</sup> *See 2008 Economic Planning Studies Final Report*, WWW.ISO-NE.COM (Oct. 2009), [https://www.iso-ne.com/static-assets/documents/committees/comm\\_wkgrps/prtcpnts\\_comm/pac/reports/2009/2008\\_eco\\_report.pdf](https://www.iso-ne.com/static-assets/documents/committees/comm_wkgrps/prtcpnts_comm/pac/reports/2009/2008_eco_report.pdf).

economic and environmental impacts associated with different resource scenarios”;<sup>52</sup>

3. a study initiated in 2011 and completed in 2014 that examined onshore wind integration and development for five different subareas;<sup>53</sup>
4. a study initiated in 2012 and completed in 2014 that examined various resource-expansion and retirement scenarios;<sup>54</sup>
5. a study initiated in 2013 and completed in 2014 that examined the economic impacts of different megawatt levels of imports across the Hydro-Québec Phase II interface;<sup>55</sup>
6. three studies initiated in 2015 and completed in 2016 that evaluated different wind-expansion scenarios: an evaluation of effects of increasing the Keene Road export limit, a transmission analysis of onshore wind integration in northern New England, and an evaluation of wind deployment off the shore of Rhode Island and Massachusetts;<sup>56</sup>
7. a two-phase study initiated in 2016 completed in 2018 to examine resource-expansion scenarios of the regional power system and the potential effects of these different future changes on resource adequacy, operating and capital costs, and options for meeting environmental policy goals;<sup>57</sup>

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<sup>52</sup> See *2009 Economic Study: Scenario Analysis of Renewable Resource Development*, WWW.ISO-NE.COM (Feb. 2010), [https://www.iso-ne.com/committees/comm\\_wkgrps/prtcpnts\\_comm/pac/reports/2010/economicstudyreportfinal\\_022610.pdf](https://www.iso-ne.com/committees/comm_wkgrps/prtcpnts_comm/pac/reports/2010/economicstudyreportfinal_022610.pdf).

<sup>53</sup> See *2011 Economic Study*, WWW.ISO-NE.COM (Mar. 31, 2014), [https://www.iso-ne.com/static-assets/documents/committees/comm\\_wkgrps/prtcpnts\\_comm/pac/reports/2014/2011\\_eco\\_study\\_final.pdf](https://www.iso-ne.com/static-assets/documents/committees/comm_wkgrps/prtcpnts_comm/pac/reports/2014/2011_eco_study_final.pdf).

<sup>54</sup> See *2012 Economic Study*, WWW.ISO-NE.COM (Apr. 2014), [https://www.iso-ne.com/static-assets/documents/committees/comm\\_wkgrps/prtcpnts\\_comm/pac/reports/2014/a9\\_2012\\_economic\\_study\\_final.pdf](https://www.iso-ne.com/static-assets/documents/committees/comm_wkgrps/prtcpnts_comm/pac/reports/2014/a9_2012_economic_study_final.pdf).

<sup>55</sup> See *2013 Economic Study*, WWW.ISO-NE.COM (Oct. 30, 2014), [https://www.iso-ne.com/static-assets/documents/2014/10/2013\\_economic\\_study\\_final.pdf](https://www.iso-ne.com/static-assets/documents/2014/10/2013_economic_study_final.pdf).

<sup>56</sup> See *2015 Economic Study: Evaluation of Increasing the Keene Road Export Limit*, WWW.ISO-NE.COM (Sep. 2, 2016), [https://www.iso-ne.com/static-assets/documents/2016/09/2015\\_economic\\_study\\_keene\\_road\\_increased\\_export\\_limits\\_fina.docx](https://www.iso-ne.com/static-assets/documents/2016/09/2015_economic_study_keene_road_increased_export_limits_fina.docx); see also *2015 Economic Study: Strategic Transmission Analysis—Onshore Wind Integration*, WWW.ISO-NE.COM (Sep. 2, 2016), [https://www.iso-ne.com/static-assets/documents/2016/09/2015\\_economic\\_study\\_onshore\\_wind\\_integration\\_final.docx](https://www.iso-ne.com/static-assets/documents/2016/09/2015_economic_study_onshore_wind_integration_final.docx); see also *2015 Economic Study: Evaluation of Offshore Wind Deployment*, WWW.ISO-NE.COM (Sep. 2, 2016), [https://www.iso-ne.com/static-assets/documents/2016/09/2015\\_economic\\_study\\_offshore\\_wind\\_development\\_final.docx](https://www.iso-ne.com/static-assets/documents/2016/09/2015_economic_study_offshore_wind_development_final.docx).

<sup>57</sup> See *2016 Economic Study: NEPOOL Scenario Analysis*, WWW.ISO-NE.COM (Nov. 17, 2017), [https://www.iso-ne.com/static-assets/documents/2017/11/final\\_2016\\_phase1\\_nepool\\_scenario\\_analysis\\_economic\\_study.docx](https://www.iso-ne.com/static-assets/documents/2017/11/final_2016_phase1_nepool_scenario_analysis_economic_study.docx); see

8. a study initiated in 2017 and completed in 2018 to examine several low-carbon-emitting resource-expansion scenarios of the regional power system and the potential effects of these different future changes on resource adequacy, operating and capital costs, and options for meeting environmental policy goals;<sup>58</sup>
9. three studies initiated in 2019 and completed in 2020 to evaluate offshore wind expansion scenarios in southern New England of up to 8,000 MW, offshore wind expansion in southern New England between 8,000 MW and 12,000 MW, and the effectiveness of transmission upgrades to Orrington South to increase production from constrained onshore renewables in Maine;<sup>59</sup>
10. a study initiated in 2020 and completed in 2022 to examine how utilizing existing and new ties to neighboring regions in a bi-directional fashion could optimize the use of renewables across several regions, minimizing spillage, and reducing the reliance on fossil units during peak hours;<sup>60</sup> and
11. the 2021 NEPOOL Future Grid Reliability Study referenced at footnote 36 above.<sup>61</sup>

These studies have provided the region a wealth of information, but have also brought to light shortcomings in the Economic Study process. First, in the approximately fifteen years the Economic Study process in Attachment K has been effective, the process has resulted in only one Needs Assessment to identify market efficiency needs<sup>62</sup> and has not produced any Market

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*also 2016 Economic Phase II Study: Regulation, Ramping, and Reserves Scenario Results Introduction*, WWW.ISO-NE.COM (Dec. 20, 2017), [https://www.iso-ne.com/static-assets/documents/2017/12/a2\\_2016\\_economic\\_study\\_phase\\_2\\_regulation\\_ramping\\_reserves\\_introduction.pdf](https://www.iso-ne.com/static-assets/documents/2017/12/a2_2016_economic_study_phase_2_regulation_ramping_reserves_introduction.pdf); *see also 2016 Economic Study Phase II - Regulation, Ramping, and Reserves*, WWW.ISO-NE.COM (Apr. 24, 2018), <https://www.iso-ne.com/static-assets/documents/2020/05/2-2018-04-13-pac-presentation.pdf>.

<sup>58</sup> *See 2017 Economic Study: Exploration of Least-Cost Emissions-Compliant Scenarios*, WWW.ISO-NE.COM (Oct. 29, 2018), [https://www.iso-ne.com/static-assets/documents/2018/10/2017\\_economic\\_study\\_final.docx](https://www.iso-ne.com/static-assets/documents/2018/10/2017_economic_study_final.docx).

<sup>59</sup> *See 2019 Economic Study: Offshore Wind Integration*, WWW.ISO-NE.COM (June 30, 2020), [https://www.iso-ne.com/static-assets/documents/2020/06/2019\\_nescoe\\_economic\\_study\\_final.docx](https://www.iso-ne.com/static-assets/documents/2020/06/2019_nescoe_economic_study_final.docx); *see also 2019 Economic Study: Significant Offshore Wind Integration*, WWW.ISO-NE.COM (Oct. 5, 2020), <https://www.iso-ne.com/static-assets/documents/2020/10/2019-anbaric-economic-study-final.docx>; *see also 2019 Economic Study: Economic Impacts of Increases in Operating Limits of the Orrington-South Interface*, WWW.ISO-NE.COM (Oct. 30, 2020), <https://www.iso-ne.com/static-assets/documents/2020/10/2019-renew-es-report-final.docx>.

<sup>60</sup> *See 2020 Economic Study: Interregional Storage's Capability to Facilitate the Effective Use of Clean Energy Resources*, WWW.ISO-NE.COM (June 10, 2022), [https://www.iso-ne.com/static-assets/documents/2022/06/2020\\_ngrid\\_economic\\_study\\_report\\_rev1.pdf](https://www.iso-ne.com/static-assets/documents/2022/06/2020_ngrid_economic_study_report_rev1.pdf),

<sup>61</sup> *See 2021 Economic Study: Future Grid Reliability Study Phase 1*, WWW.ISO-NE.COM (Jul. 29, 2022), [https://www.iso-ne.com/static-assets/documents/2022/07/2021\\_economic\\_study\\_future\\_grid\\_reliability\\_study\\_phase\\_1\\_report.pdf](https://www.iso-ne.com/static-assets/documents/2022/07/2021_economic_study_future_grid_reliability_study_phase_1_report.pdf).

<sup>62</sup> *See, e.g., Draft Keene Road Market Efficiency Transmission Upgrade Needs Assessment Scope of Work and Assumptions*, WWW.ISO-NE.COM (Sept. 21, 2016), <https://www.iso-ne.com/static->

Efficiency Upgrades.<sup>63</sup> As stated above, stakeholders may request Economic Studies for informational purposes without requesting that the ISO conduct a Needs Assessment.<sup>64</sup> The vast majority of stakeholder-requested Economic Studies performed thus far were for informational purposes to inform potential policy or investment decisions, such as those to integrate new resources and load.<sup>65</sup> These studies evaluated hypothetical scenarios with study horizons in the distant future and are based on assumptions provided by the stakeholders requesting the Economic Studies, which may or may not be applicable to the entire region.<sup>66</sup> As a result, the Economic Study process has not resulted in the consistent analysis of the New England Transmission System on system-wide basis to identify market efficiency needs and upgrades on consistent basis.<sup>67</sup> Stakeholders have expressed interest in moving beyond the current studies' framework to allow for Economic Studies that result in both informational and actionable study results (*i.e.*, Economic Studies that result in Market Efficiency Transmission Upgrades).<sup>68</sup>

Second, variability in the size and scope of Economic Study requests, with some narrowly-scoped (*e.g.*, the 2019 Economic Study examined the effectiveness of transmission upgrades to Orrington South to increase production from constrained onshore renewables in Maine)<sup>69</sup> and others broadly-scoped (*e.g.*, the 2021 Economic Study examined potential reliability gaps in operating the New England system in the year 2040 with more variable energy resources and

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assets/documents/2016/09/a5\_keene\_road\_metu\_upgrade.pdf (assessing the potential Market Efficiency Transmission Upgrade as a result of the Keene Road Economic Study).

<sup>63</sup> See Judd Testimony at p. 4. Currently, the ISO assesses market efficiency needs separate and apart from the Economic Studies. Market efficiency needs have not been found given lack of congestion of the system.

<sup>64</sup> See, *e.g.*, NEPOOL, 2016 Economic Study Request Memorandum, WWW.ISO-NE.COM (Mar. 31, 2016) ("The analyses intended by the Proposal would examine a broad range of hypothetical futures based on a series of assumptions. The purpose of hypothesizing about futures is to produce a broad range of data that is directional and indicative only, and not to predict any particular future. Importantly, none of the hypothetical futures represent a resource plan and none should be considered a plan. Nor is the purpose of the study sought by the Proposal intended to advocate or suggest support for or against any particular outcome or for or against any state laws or policies. Rather, the analysis is a study only-- intended to provide information that all stakeholders in the New England wholesale power markets can use to better understand the interaction of public policies and markets and the ability to achieve common goals."), [https://www.iso-ne.com/static-assets/documents/2016/04/nepool\\_economic\\_study\\_request\\_scenario\\_analysis\\_memo.docx](https://www.iso-ne.com/static-assets/documents/2016/04/nepool_economic_study_request_scenario_analysis_memo.docx); see also Judd Testimony at p.5.

<sup>65</sup> See Judd Testimony at p.5.

<sup>66</sup> See *id.*

<sup>67</sup> See *id.*

<sup>68</sup> See *id.*

<sup>69</sup> See 2019 Economic Study: Economic Impacts of Increases in Operating Limits of the Orrington-South Interface, WWW.ISO-NE.COM (Oct. 30, 2020), <https://www.iso-ne.com/static-assets/documents/2020/10/2019-renew-es-report-final.docx>.

increased electrification of the overall economy)<sup>70</sup> leads to overlapping studies, which prevents the ISO from incorporating results and lessons learned from previous Economic Studies into current Economic Studies.<sup>71</sup> Under the current timeline to complete Economic Studies, the ISO selects an Economic Study in June, which leaves only six months to scope, analyze, and complete the study if the ISO were to do so in the same year it was initiated.<sup>72</sup> Economic Studies with larger scopes have taken approximately 18 to 24 months to complete, and in some cases longer.<sup>73</sup> As a result, the following year's studies start before previous study requests are completed and results and lessons learned from previous studies are unable to influence or be applied to the next study.<sup>74</sup>

Third, variability in the scope and modeling assumptions (e.g., study period, resource mix, load, etc.) of the Economic Studies hinders comparison between Economic Studies and, as a result, the identification of system trends between Economic Study cycles.<sup>75</sup> Moreover, the variability in scope and modeling assumptions has impacted the ability of the ISO to coordinate with, or model, neighboring systems that are not planning the system based on the same assumptions as those in the Economic Studies.<sup>76</sup> For example, in 2021, the ISO initiated a study to examine potential reliability gaps in operating the New England system in the year 2040 that may be caused by more variable energy resources and increased electrification of the overall economy. At the time the study began, models for neighboring regions with similar base assumptions, such as assumptions related to the year of study or the degree of planned variable energy resources and load electrification, did not exist.<sup>77</sup> As a result, the ISO had to make its own modeling assumptions for neighboring regions that were not aligned with the planning decisions, models, and assumptions ultimately made by those regions.<sup>78</sup> The Economic Study Revisions proposed herein will ease the ISO's ability to model neighboring regions more accurately because there will be a clear and consistent idea of the year(s) of study and assumptions.<sup>79</sup>

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<sup>70</sup> See *2021 Economic Study: Future Grid Reliability Study Phase 1*, WWW.ISO-NE.COM (Jul. 29, 2022), [https://www.iso-ne.com/static-assets/documents/2022/07/2021\\_economic\\_study\\_future\\_grid\\_reliability\\_study\\_phase\\_1\\_report.pdf](https://www.iso-ne.com/static-assets/documents/2022/07/2021_economic_study_future_grid_reliability_study_phase_1_report.pdf).

<sup>71</sup> See Judd Testimony at p. 5.

<sup>72</sup> See Judd Testimony at pp. 5-6.

<sup>73</sup> See Judd Testimony at p. 6.

<sup>74</sup> See *id.*

<sup>75</sup> See *id.*

<sup>76</sup> See *id.*

<sup>77</sup> See *id.*

<sup>78</sup> See *id.*

<sup>79</sup> See *id.*

### **C. Proposal to Address Shortcomings and Improve the Economic Study Process**

To address these issues and improve the Economic Study process, the Filing Parties propose to revise the Economic Study procedures to incorporate defined scenarios that: (1) identify market efficiency issues, and as applicable, market efficiency needs on PTF portion of the New England Transmission System in a dedicated scenario as part of the Economic Study process; (2) provide sufficient consistency between Economic Studies to incorporate lessons learned and identify system trends; (3) increase alignment with the other ISO system planning processes and modeling of neighboring regions, and; (4) continue to provide stakeholders with full participation in the Economic Study process and with the flexibility to request a scenario and a broad range of sensitivities for informational purposes.<sup>80</sup> The defined reference scenarios are the: (1) Benchmark Scenario; (2) Market Efficiency Needs Scenario; (3) Policy Scenario; and (4) Stakeholder-Requested Scenario.<sup>81</sup>

The Benchmark Scenario will be the initial reference scenario studied in a given Economic Study cycle.<sup>82</sup> This scenario will be used to improve the Economic Study planning model and associated planning assumptions used in the other three reference scenarios proposed in this filing by comparing the Benchmark Scenario against the historical performance of the system in the previous year and adjusting the assumptions and model accordingly.<sup>83</sup> The Market Efficiency Needs Scenario will be a reference scenario used to identify market efficiency issues and, as applicable, market efficiency needs on the New England Transmission System.<sup>84</sup> The Policy Scenario will be used for informational purposes to identify any potential system efficiency issues resulting from New England and other energy policies and goals (*e.g.*, federal and state legislation, utility renewable portfolio standard targets, etc.).<sup>85</sup> The Stakeholder-Requested Scenario will be a reference scenario used to study a stakeholder-requested scenario with region-wide scope not covered by the other three defined references scenarios.<sup>86</sup>

Additionally, following the initial analyses and presentation of results for each defined reference scenario, stakeholders may request that the ISO study additional sensitivities to test the effect of a specific change to input assumptions (*e.g.*, the resource mix, transmission topology, cost assumptions, etc.).<sup>87</sup> These stakeholder-requested sensitivities, along with the Stakeholder-Requested Scenario, accommodate the addition of the other three defined reference scenarios to

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<sup>80</sup> *See id.* at p. 7.

<sup>81</sup> *See id.*

<sup>82</sup> *See id.*

<sup>83</sup> *See id.*

<sup>84</sup> *See id.*

<sup>85</sup> *See id.* at pp. 7-8.

<sup>86</sup> *See id.* at p. 8.

<sup>87</sup> *See id.*

Attachment K while also continuing to provide stakeholders and the ISO with mechanisms to, respectively, request and study stakeholder-requested scenarios in the Economic Study process.<sup>88</sup>

The ISO is also proposing procedural revisions designed to improve the process for Economic Studies.<sup>89</sup> For example, to avoid the overlapping studies, the proposed changes extend the duration of the study period for Economic Studies to provide sufficient time for the ISO to complete each Economic Study cycle before the subsequent cycle starts.<sup>90</sup> This will allow the results of one study cycle to inform and be used as an input for the next Economic Study cycle and provide sufficient time to perform any possible requests for proposal to solve market efficiency needs identified in the market efficiency Needs Assessment.<sup>91</sup>

Collectively, the proposed procedural revisions and the addition of defined scenarios to the Economic Study process will provide more insight into system trends, ensure consistent analysis, and facilitate comparison between the Economic Studies in subsequent cycles, all of which can further inform future decisions in transmission investment.<sup>92</sup> These improvements could also facilitate the region's clean energy transition: the new construct will consistently produce results that could aid the states with the implications of public policy developments and inform future decisions in transmission investment.<sup>93</sup> For example, the Policy Scenario accounts for New England states' policies, among others, which can help inform states' decisions regarding the magnitude of economic benefits that could be gained from transmission expansion to, by way of example, allow more renewables to flow and reduce system congestion.<sup>94</sup> The Economic Study Revisions further support the transition by providing an analysis framework that could be used by the region to evaluate preparedness as the region transitions to renewable energy.<sup>95</sup> Specifically, the Economic Study Revisions provide a repeatable framework to assess the impact of the clean energy transition and the changing system needs over time.<sup>96</sup> Moreover, the proposed revisions received overwhelming state and stakeholder support.<sup>97</sup> For these reasons and the others discussed

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<sup>88</sup> As discussed below, the ISO may also propose additional sensitivities be studied after the initial analyses and presentation of results for each reference scenario; *see also* Judd Testimony at p. 8.

<sup>89</sup> *See* Judd Testimony at p. 8.

<sup>90</sup> *See id.*

<sup>91</sup> *See id.*

<sup>92</sup> *See id.* at pp. 8-9.

<sup>93</sup> *See id.* at p. 9.

<sup>94</sup> *See id.*

<sup>95</sup> *See id.*

<sup>96</sup> *See id.*

<sup>97</sup> *See infra* at Section VII.

in this filing, the Filing Parties request that the Commission accept the changes as filed herein, without condition, suspension, or hearing, effective March 31, 2023.

**V. THE PROPOSED TARIFF REVISIONS ACCOMPLISH THE PRINCIPLES AND GOALS OF ORDER Nos. 890 AND 1000, AND ARE JUST AND REASONABLE**

Order No. 1000 requires that each public utility transmission provider participate in a regional transmission planning process that produces a regional transmission plan and that complies with planning principles of Order No. 890, including the economic studies principle.<sup>98</sup> In Order No. 890, the Commission stated that its primary objective in adopting the economic planning principle is to ensure that the transmission planning process encompasses both reliability and economic considerations.<sup>99</sup> The economic studies principle requires that “. . . stakeholders be given the right to request a defined number of high priority studies annually . . . to address congestion and/or integration of new resources or loads. The intent of this approach is to allow customers, not the transmission provider, to identify those portions of the transmission system where they have encountered transmission problems due to congestion or whether they believe upgrades and other investments may be necessary to reduce congestion and to integrate new resources . . . . The cost of the defined number of high priority studies would be recovered as part of the overall *pro forma* OATT cost of service.”<sup>100</sup> The Commission determined that the cost of the high priority studies would be recovered as part of transmission providers’ overall cost of service under the OATT, while the cost of additional studies would be borne by the stakeholder(s) requesting the study.<sup>101</sup>

The Commission emphasized that existing regional processes conducted by RTOs and ISOs are not exempt from these economic planning study requirements.<sup>102</sup> However, the Commission also “applauded [the] efforts” of RTOs and ISOs that had taken progressive steps to identify investments that could reduce congestion or integrate new resources<sup>103</sup> and accepted a variety of methods and processes proposed by RTOs and ISOs in their respective compliance filings to satisfy the economic planning principle. For example, under the PJM planning process accepted by the Commission as compliant with Order No. 890, rather than stakeholders requesting the PJM perform one-off studies, PJM performs a market efficiency study and analysis of its system on a recurring basis and compares the costs and benefits for various types of economic

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<sup>98</sup> Order No. 1000 at PP 146, 151.

<sup>99</sup> Order No. 890 at P 544.

<sup>100</sup> *Id.* at P 773.

<sup>101</sup> *Id.* at P 547.

<sup>102</sup> *Id.* at PP 545, 773.

<sup>103</sup> *Id.* at P 545.



based transmission improvements.<sup>104</sup> Throughout the process, PJM stakeholders have opportunities to provide input to PJM regarding assumptions used in the studies and propose projects to address the constraints that PJM identifies in the market efficiency analyses.<sup>105</sup> In addition, any market participant at any time may submit to PJM for consideration requests to interconnect merchant transmission facilities or generation facilities that could address an economic constraint.<sup>106</sup> Similarly, the Midcontinent Independent System Operator, Inc. (“MISO”) factors into its planning process both economic and reliability concerns, and addresses the most significant congestion and resource integration issues that are identified and prioritized collectively with stakeholders, as opposed to conducting economic planning studies on a “request-by-request basis.”<sup>107</sup>

With the variation requested below, the Economic Study Revisions proposed herein are consistent with the economic planning principles in Order No. 890.<sup>108</sup> Pursuant to the Stakeholder-Requested Scenario, stakeholders may still request that the ISO perform Economic Studies to identify those portions of the transmission system where they believe upgrades and other investments may be necessary to reduce congestion and to integrate new resources pursuant to the Stakeholder-Requested Scenario. Moreover, for each defined scenario (*i.e.*, the Benchmark Scenario; Market Efficiency Needs Scenario; Policy Scenario; and Stakeholder-Requested Scenario), stakeholders may request, and the ISO may propose, additional sensitivities to test the effect of a specific change to input assumptions to understand the causal effect of the change to the results. The ISO in consultation with the Planning Advisory Committee will prioritize and list the sensitivities that can be completed during the Economic Study cycle. The cost of performing the defined scenarios, including studying any stakeholder-requested reference scenario sensitivities, would be recovered as part of ISO’s overall cost of service under the OATT, while the cost of additional studies would be borne by the stakeholder(s) requesting the study. After implementation, the ISO and stakeholders will periodically review the new process to ensure that it adequately allows for stakeholder scenarios and input.

The Filing Parties seek a variation to the requirement in Order No. 890 that transmission providers conduct economic planning studies annually under the “consistent with or superior to” standard.”<sup>109</sup> As described above, the Economic Study process, which is initiated each year if

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<sup>104</sup> See *PJM Interconnection, L.L.C.*, Order on Compliance Filing, 123 FERC ¶ 61,163, at P 84 (May 15, 2008) (“PJM 890 Order”).

<sup>105</sup> See PJM 890 Order at PP 82, 96-99.

<sup>106</sup> See *id.* at P 97.

<sup>107</sup> See *Midwest Independent Transmission System Operator, Inc.*, Order on Compliance Filing, 123 FERC ¶ 61,164, at P 74 (May 15, 2008) (“MISO 890 Order”).

<sup>108</sup> See Order No. 890 at P 160.

<sup>109</sup> See *id.* (requiring RTOs and ISO to demonstrate that a variation from the requirements adopted in Order No. 890 satisfies the “consistent with or superior to” standard and declining to adopt of an “independent entity variation” or a “regional variation” standard).

requested by a stakeholder, may take 18 to 24 months to complete, and in some cases longer.<sup>110</sup> In many cases, the following year's Economic Studies begin before the previous year's Economic Studies are completed. This prevents results and lessons learned from previous Economic Studies from influencing or being applied to subsequent Economic Studies, among others.

Therefore, similar to the economic planning processes accepted by the Commission for other RTOs and ISOs,<sup>111</sup> the Filing Parties propose to conduct an Economic Study process that identifies and prioritizes significant market efficiency issues collectively with stakeholders once every two to three years rather than on a request-by-request basis, which is a variation from the requirement in Order No. 890 that stakeholders be given the right to request studies annually. Throughout the process, stakeholders will have opportunities to provide input into the Economic Study process. In addition, any Market Participant at any time may submit a request to interconnect Merchant Transmission Facilities or generators that could address an economic constraint. Under the Economic Study Revisions proposed herein, the ISO will initiate and complete the Economic Study process before the subsequent cycle starts. This, in turn, will allow the results of each Economic Study cycle to inform the subsequent Economic Study cycle. This will also allow Market Efficiency Transmission Upgrades to be incorporated into each Regional System Plan, as applicable, and is consistent with or superior to the Commission's requirement in Order Nos. 890 and 1000 that transmission providers effectuate a regional transmission planning process that incorporates both reliability and economic upgrades in the development of a regional transmission plan and responds to a select number of economic planning studies on a request-by-request basis.

## **VI. DESCRIPTION AND JUSTIFICATION OF THE PROPOSED TARIFF REVISIONS**

### **A. Tariff Revisions to Effectuate Economic Study Revisions**

To effectuate the Economic Study Revisions, the Filing Parties propose to add new Section 17 to Attachment K. New Section 17 replaces the current process described in Section 4.1(b) and includes the newly defined reference scenarios and procedures for implementing the Economic Study process. The Filing Parties also propose to incorporate conforming revisions to Section I.1.2 of the Tariff and Attachment K.

#### *1. Overview and Reference Scenarios*

As described in new Section 17.1, the Economic Study process will be used to identify market efficiency issues on the PTF portion of the New England Transmission System and, as

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<sup>110</sup> See *infra* at Section IV (listing the initiation date and completion date of each Economic Study, many of which overlap).

<sup>111</sup> See *New York Independent System Operator, Inc.*, Order Accepting Tariff Revisions, 175 FERC ¶ 61,010 at, PP 1, 3, 7 (Apr. 9, 2021) (accepting revisions a biennial system-wide congestion study that initiated by NYISO); see also PJM 890 Order at PP 96-99; see also MISO 890 Order at p 74.

applicable, evaluate competitive solutions to alleviate identified market efficiency needs. The process will also provide information to facilitate the evaluation of economic and environmental impacts of New England regional policies, federal policies, and various resource technologies on satisfying future resource needs in the region. In consultation with the Planning Advisory Committee, the ISO will develop and study the following four reference scenarios, which are described in new Section 17.2 of Attachment K: the Benchmark Scenario, Market Efficiency Needs Scenario, Policy Scenario, and Stakeholder-Requested Scenario. The Benchmark Scenario will be the initial reference scenario studied in a given Economic Study cycle. It will be used to improve the Economic Study planning model and associated planning assumptions used in the other three reference scenarios (*i.e.*, Market Efficiency Needs Scenario, Policy Scenario, and Stakeholder-Requested Scenario) proposed in this filing by comparing the Benchmark Scenario against the historical performance of the system in the previous year and adjusting the assumptions and model accordingly. The Benchmark Scenario will use the existing base case model, historical base case data, and historical observations and performance of the system from the prior year to the beginning of the applicable Economic Study cycle<sup>112</sup> to identify any modeling issues in the base set of input data. The model and assumptions used for the Market Efficiency Needs Scenario and Policy Scenario will be adjusted accordingly based on the study results of the Benchmark Scenario.<sup>113</sup>

The purpose of the Market Efficiency Needs Scenario is to incorporate a defined reference scenario into the Economic Study process that will be used each study cycle to identify market efficiency issues and, as applicable, market efficiency needs on the PTF portion of the New England Transmission System (*i.e.*, on a system-wide basis). Unlike the Policy Scenario and Stakeholder-Requested Scenario, which are used for informational purposes to study the effects of policies and stakeholder-requested scenarios that may or may not come to fruition, only the Market Efficiency Needs Scenario identifies market efficiency issues and, as applicable, market efficiency needs based on planned and forecasted system topology, configurations, and system conditions similar to other system planning models used in Needs Assessments.<sup>114</sup> The model used for the Market Efficiency Needs Scenario will be the updated base case from the Benchmark Scenario and forecasted out to the ten-year planning horizon year using assumptions and criteria in Section

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<sup>112</sup> For example, the Benchmark Scenario for an Economic Study cycle that starts in 2024 would model historical observations from 2023.

<sup>113</sup> See Judd Testimony at pp. 11-12.

<sup>114</sup> While this scenario links the Economic Study process with the market efficiency construct for potential identification of Market Efficiency Transmission Upgrades, nothing precludes stakeholders from pursuing transmission investments informed by the other scenario analyses through, for example, the Elective Transmission Upgrade process. In other words, while the results of the Policy Scenario and Stakeholder-Requested Scenario are informational, there are mechanisms that stakeholders can use to effect the results, as is the case today.

4.1(f) of Attachment K. The study year shall be year N+10 and the simulation length shall be one year for the Market Efficiency Needs Scenario.<sup>115</sup>

The ISO will use the Market Efficiency Needs Scenario and criteria in Attachment N<sup>116</sup> to identify market efficiency needs on the PTF portion of the New England Transmission System pursuant to a Needs Assessment. All of the market efficiency issues and associated benefits of relieving those issues will be documented in a market efficiency Needs Assessment conducted pursuant to Section 4.1 of Attachment K. Any market efficiency issues that meet the criteria in Attachment N will be identified as market efficiency needs, and a request for proposal or multiple requests for proposals will be issued to initiate the competitive solution process for Market Efficiency Transmission Upgrades to address the identified market efficiency need or needs pursuant to Section 4.3 of this Attachment.<sup>117</sup>

The purpose of the Policy Scenario described in new Section 17.2 of Attachment K is to identify any potential market efficiency issues resulting from the New England states' energy policies and goals, among others (e.g., federal legislation, state legislation, or utility renewable portfolio standard targets), for informational purposes. The policies and goals selected for the Policy Scenario shall be selected by the ISO and reviewed by the Planning Advisory Committee pursuant to new Section 17.4 of Attachment K. The model used for the Policy Scenario will be the base case model resulting from the Benchmark Scenario and forecasted out to the applicable year when relevant New England policies and goals, and other applicable energy policies and goals, are in full effect. The study year for the Policy Scenario will be dependent on deadlines for achieving the New England region and other energy policies and goals. However, the study year will be at least ten years into the future and cover the deadlines for achieving all applicable goals and policies. The study simulation length for the Policy Scenario will be one year. The Policy Scenario will help inform states' decisions regarding the magnitude of economic benefits that could be gained from transmission expansion, for example, to allow more renewables to flow and reduce system congestion.<sup>118</sup>

The Stakeholder-Requested Scenario will be a reference scenario used for informational purposes to study a scenario requested by stakeholders with region-wide scope that is not already covered by the other three reference scenarios described earlier. The model used for the Stakeholder-Requested Scenario shall be the base case model resulting from the Benchmark

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<sup>115</sup> See Judd Testimony at pp. 12-13.

<sup>116</sup> The ISO is exploring potential revisions to the factors and metrics used to identify Market Efficiency Transmission Upgrades in Attachment N of the OATT. To assist with this effort, the ISO is performing the Economic Planning for the Clean Energy Transition ("EPCET") pilot study to evaluate new software and complete a sample Market Efficiency Needs Scenario in early 2023. Importantly, the Economic Study Revisions proposed herein are just and reasonable on their own and not dependent on any potential future revisions to Attachment N that may stem from that effort.

<sup>117</sup> See Attachment K of the OATT at proposed Sections 17.5-17.6; *see also* Judd Testimony at p. 13.

<sup>118</sup> See Judd Testimony at pp. 13-14.

Scenario and then forecasted out to a year with assumptions requested by the stakeholders and agreed upon by the ISO. The study year shall be dependent on the requested scenario and the simulation length shall be one year. Similar to the Policy Scenario, the results of the Stakeholder-Requested Scenario will be for informational purposes only. This scenario, along with the other reference scenarios proposed in the Economic Study Revisions, will provide the region more insight into system trends, consistent analysis, and facilitate comparison, all of which can further inform future decisions in transmission investment.<sup>119</sup>

## 2. *Procedural Revisions*

Under new Section 17.3 of Attachment K, the Economic Study process will be conducted at least once every three years and at most once every two years. The process will be initiated for the first time in January 2024.<sup>120</sup> Rather than wait for stakeholders to request an Economic Study to initiate the process,<sup>121</sup> the ISO will actively initiate the process each study cycle. This will not hinder the ability of stakeholders to request studies to identify those portions of the transmission system where they believe upgrades and other investments may be necessary to reduce congestion and to integrate new resources. After the ISO initiates the Economic Study process, the ISO will actively solicit the input of stakeholders through Planning Advisory Committee to determine the Stakeholder-Requested Scenario and, for each defined reference scenario, additional sensitivities.<sup>122</sup>

While a stakeholder request for the ISO to conduct Economic Studies will no longer trigger the initiation of the Economic Study process, the Economic Study Revisions will not hinder stakeholders' ability to request that the ISO study a specific scenario or sensitivities (*i.e.*, stakeholders are not losing the ability to request a specific scenario or sensitivities). Stakeholders may still request—and collectively identify and prioritize with the ISO—analysis beyond the Benchmark Scenario, Market Efficiency Needs Scenario, and the Policy Scenario to address market inefficiencies, congestion constraints, or integrate new resources or load. Moreover, following the initial analyses and presentation of results for each defined reference scenario, stakeholders may request, and the ISO may propose, additional sensitivities be applied to a reference scenario and studied to test the effect of a specific change to input assumptions (*e.g.*, the resource mix, transmission topology, cost assumptions, etc.).<sup>123</sup> In addition, under new Section 17.8, an individual stakeholder may still request that the ISO conduct individual Economic Studies at the stakeholder's own expense to examine situations where potential regulated transmission solutions, market responses, or investments could result in (i) a net reduction in total production

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<sup>119</sup> See Judd Testimony at p. 14.

<sup>120</sup> See Attachment K of the OATT at proposed Section 17.3.

<sup>121</sup> See Attachment K of the OATT at Section 4.1(b).

<sup>122</sup> See Attachment K of the OATT at proposed Section 17.3; *see also* Judd Testimony p. 15.

<sup>123</sup> See *id.* at proposed Section 17.8.

cost to supply system load based on the factors specified in Attachment N of this OATT, (ii) reduced congestion, or (iii) the integration of new resources or loads, or both, on an aggregate or regional basis.<sup>124</sup>

To initiate the Economic Study cycle, the ISO will provide the Planning Advisory Committee with notice that the ISO is initiating the process for the Economic Study cycle pursuant to new Section 17.3 of Attachment K. Within three months of initiating the process, the ISO will provide the Planning Advisory Committee the schedule for the Economic Study cycle. The schedule will include dates for the ISO's collection, and stakeholders' submission, of data to be used in the studies, the preparation of models, the completion of studies, and the issuance of study results. The schedule will also include a one-month period for stakeholders to submit proposals for the Stakeholder-Requested Scenario. If the Economic Study cycle and potential resulting competitive request for proposals process cannot be completed within the initial schedule, the ISO will notify stakeholders of such, provide a revised estimated completion date, and provide an explanation of the reason or reasons why the additional time is required.<sup>125</sup>

After initiating the process, the ISO will prepare and post on its website a proposed scope for the defined reference scenarios, and the associated parameters and assumptions pursuant to new Section 17.4 of Attachment K.<sup>126</sup> The ISO will either provide the Planning Advisory Committee with notice that the ISO posted the information or send the information itself to the Planning Advisory Committee after it is posted.<sup>127</sup> After the notice or information is sent to the Planning Advisory Committee, a Planning Advisory Committee meeting will be held to solicit stakeholder input for consideration by the ISO on the study's scope, parameters, and assumptions.<sup>128</sup>

Following the analyses and presentation of the results of the Economic Study defined reference scenarios, stakeholders may request, and the ISO may propose, additional sensitivities to test the effect of specific changes to input assumptions. The sensitivities will be limited to a single theme or category of changes to allow for better understanding of the causal effect of the change to the results. The ISO will then prioritize and list the sensitivities that can be completed during the Economic Study cycle taking into consideration the impact of the additional efforts on the ISO resources and other priorities.<sup>129</sup> Results from studies conducted with stakeholder-requested scenario sensitivities will be used for informational purposes only (*i.e.*, any identified market efficiency issues resulting from a study with a stakeholder-requested scenario sensitivity

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<sup>124</sup> See *id.* at proposed Section 17.4; see also Judd Testimony pp. 15-16.

<sup>125</sup> See Attachment K of the OATT at proposed Section 17.3; see also Judd Testimony p. 16.

<sup>126</sup> See Attachment K of the OATT at proposed Section 17.4.

<sup>127</sup> See *id.* at proposed Section 17.4.

<sup>128</sup> See *id.* at proposed Section 17.4; see also Judd Testimony p. 17.

<sup>129</sup> See Attachment K of the OATT at proposed Section 17.4.

cannot be evaluated as a market efficiency need against the factors and metrics in Attachment N), which stakeholders or the ISO can use to inform and evaluate potential upgrades or other investments that could reduce congestion or integrate new resources and loads on an aggregated or regional basis.<sup>130</sup> In addition to the Stakeholder-Requested Scenario, the ability of stakeholders to request, and the ISO to study, additional sensitivities provides stakeholders with another opportunity to have the ISO study and test the effect of a specific changes to the system, such as a different resource mix, transmission topology, cost assumptions, etc., beyond those in the defined scenarios.<sup>131</sup>

### 3. *Cost Recovery*

Pursuant to new 17.9 of the Economic Study Revisions, the costs of the Economic Study process described in Sections 17.2 through 17.7 (*i.e.*, the costs of studying the defined reference scenarios and the associated stakeholder process) will be recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff. Schedule 1 of Section IV.A is Tariff provision under which the ISO recovers administrative costs incurred by the ISO to provide Scheduling, System Control and Dispatch Service under the OATT, including costs for transmission system planning that support service under Schedule 1.

The costs of the Economic Studies requested by individual stakeholders performed by the ISO under new Section 17.8 will be paid for by the stakeholder requesting the study. The ISO may also hire a consultant to conduct the analysis, and the entity requesting the study shall be responsible for the ISO's costs for study administration, study analysis, and consultants used to perform the study. This is consistent with cost recovery of Economic Studies<sup>132</sup> today and aligns with the Commission's requirement in Order No. 890.<sup>133</sup>

### 4. *Conforming Changes*

The Filing Parties also propose conforming revisions to Section I.1.2 of the Tariff and Attachment K of the OATT. Proposed Section I.1.2 was revised to include a definition for the Benchmark Scenario, Market Efficiency Needs Scenario; Policy Scenario; and Stakeholder-Requested Scenario. (*i.e.*, each of the defined reference scenarios).<sup>134</sup> The Filing Parties also

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<sup>130</sup> While the results of the stakeholder-requested scenario sensitivities are informational, nothing precludes stakeholders from pursuing transmission investments informed by the additional scenario sensitivities through other Tariff mechanisms including, for example, the Elective Transmission Upgrade process in Schedule 25 of the OATT.

<sup>131</sup> See Attachment K of the OATT at proposed Section 17.4; *see also* Judd Testimony pp. 17-18.

<sup>132</sup> See Attachment K of the OATT at Section 4.1(b)(iv) ("the costs of [Economic Studies] will be recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff."); *see also id.* at Section 4.1(b).

<sup>133</sup> See Order No. 890 at P 547 ("The cost of the defined number of high priority studies would be recovered as part of the overall *pro forma* OATT cost of service.").

<sup>134</sup> See Tariff at proposed Section I.1.2.

propose to revise the definition of Economic Studies. The current definition of Economic Studies in Section I.2.2 states that Economic Study is defined in Section 4.1(b) of Attachment K. As discussed below, Section 4.1(b) is being deleted. Therefore, the Filing Parties propose the following definition for Economic Study, which generally mirrors the language accepted by the Commission in Section 4.1(b) of the currently effective version of Attachment K.<sup>135</sup>

**Economic Study or Economic Studies** are described in Section 17 of Attachment K to the OATT that are used to examine situations where potential regulated transmission solutions, market responses, or investments could result in (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of the OATT, (ii) reduced congestion, or (iii) the integration of new resources or loads, or both, on an aggregate or regional basis.<sup>136</sup>

The Filing Parties also propose to delete Section 4.1(b) of Attachment K, which consists of the Economic Study requirements being replaced with the Economic Study Revisions in Section 17. Finally, the Filing Parties propose the following conforming changes in Attachment K:

1. revisions to Section 2.2 to specify that the Planning Advisory Committee, with the assistance of, and in coordination with, the ISO will identify and prioritize the Stakeholder-Requested Scenario and stakeholder-requested scenario sensitivities;
2. revisions to Section 4.1 to clarify that the regional system planning process established in this Attachment K has three different processes (*i.e.*, the process for identifying and addressing market efficiency, reliability, and public policy needs);
3. revisions to Section 4.1 to specify that the planning process in Section 17 of Attachment K will be used to identify market efficiency issues and, along with Section 4.1(a), trigger market efficiency Needs Assessments, which will be conducted pursuant to Section 4 of Attachment K;
4. revisions to Section 4.1 to clarify that Needs Assessments to maintain the reliability of the PTF system are reliability Needs Assessments and Needs Assessments to maintain the efficient wholesale electric markets are market efficiency Needs Assessment;
5. revisions to Section 4.1(a) to remove a reference to Section 4.1(b), which is being deleted, and clarify that Needs Assessments may be used to address market efficiency issues;
6. revisions to Section 12.4(a)(v) to specify that the prioritization and substance of Stakeholder-Requested Scenarios to be conducted by the ISO in a given Economic

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<sup>135</sup> See Attachment K of the OATT at Section 4.1(b).

<sup>136</sup> See Tariff at proposed Section I.2.2, definition of Economic Study.



Study cycle are designated key decision points for Reviewable Determinations under the Dispute Resolution Procedures of the Economic Study Process;

7. revisions to Section 12.4(a)(vi) to specify that the prioritization of Economic Study scenario sensitivities to be performed in a given Economic Study cycle where the Planning Advisory Committee is not able to prioritize them is designated key decision point for Reviewable Determinations under the Dispute Resolution Procedures of the Economic Study Process; and
8. revisions to Sections 12.4(a)(v) and 12.4(a)(vi) to replace references to Section 4.1(b), which section is being deleted, with new Section 17.

## **VII. STAKEHOLDER PROCESS**

The Economic Study Revisions were considered through the complete NEPOOL Participant Processes<sup>137</sup> and supported by the Participants Committee. As further detailed below, the NEPOOL Technical Committee considered the proposed revisions before the complete package of Economic Study Revisions were acted upon by the Participants Committee.

The ISO initially presented its proposal to the NEPOOL Transmission Committee at its May 31, 2022 meeting. The NEPOOL Transmission Committee subsequently reviewed and provided input on the Economic Study Revisions at its meetings on June 28, August 16, October 26, and November 22. At the November 22 meeting, the NEPOOL Transmission Committee voted in favor of recommending that the NEPOOL Participants Committee support the Economic Study Revisions with no opposition and three abstentions. At its January 5, 2023 meeting, the NEPOOL Participants Committee voted unanimously in support of the changes, with no opposition or abstentions.

## **VIII. REQUESTED EFFECTIVE DATE**

The Filing Parties request an effective date of March 31, 2023 for the Economic Study Revisions, which is 60 days from the date of this filing.

## **IX. 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. However, the Economic Study Revisions are not a traditional "rate," and the Filing Parties are not traditional investor-owned utilities. In light of these circumstances, the Filing Parties submit the following additional information in substantial compliance with relevant provisions of Section

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<sup>137</sup> Participant Processes has the meaning given in Participants Agreement Among ISO New England Inc. as the Regional Transmission Organization for New England and the New England Power Pool and the Entities that are from Time To Time Parties hereto constituting the Individual Participants.

35.13, and request a waiver of Section 35.13 of the Commission's regulations to the extent the content or form deviates from the specific technical requirements of the regulations.

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

- ♦ this transmittal letter;
- ♦ marked sections of the Tariff reflecting the Economic Study Revisions;
- ♦ clean sections of the Tariff reflecting the Economic Study Revisions;
- ♦ the Judd Testimony;
- ♦ a list of the governors, utility regulatory agencies in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont, and other entities, to which a copy of this filing is being sent electronically.

35.13(b)(2) – As noted above, the Filing Parties, request that the Economic Study Revisions become effective on March 31, 2023.

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's website at <https://www.iso-ne.com/participate/participant-asset-listings/directory?id=1&type=committee>. An electronic copy of this transmittal letter and the accompanying materials has also been sent to the governors and electric utility regulatory agencies for the six New England states which comprise the New England Control Area, and to the New England Conference of Public Utility Commissioners, Inc. Their names and addresses are shown in the attached listing. In accordance with Commission rules and practice, there is no need for the Governance Participants or the entities identified in the listing 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 pursuant to this filing is contained in Section VII of this transmittal letter.

35.13(b)(5) - The reasons for this filing are discussed in the introduction of this transmittal letter and in the Judd Testimony.

35.13(b)(6) - The ISO's approval of the Economic Study Revisions is evidenced by this filing. With respect to NEPOOL's support, as noted in Section VII of this transmittal letter, the Economic Study Revisions reflect the outcome of the Participant Processes required by the Participants Agreement, and is supported by the NEPOOL 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.

35.13(b)(8) – A form of notice and electronic media are no longer required for filings in light of the Commission’s Combined Notice of Filings notice methodology.

35.13(c)(1) – The Economic Study Revisions herein do not modify a traditional “rate.” The statement required under this Commission regulation is not applicable to this filing.

35.13(c)(2) – The ISO does not provide services under other rate schedules that are similar to the wholesale, resale and transmission services it provides under the Tariff.

35.13(c)(3) – No specifically assignable facilities have been or will be installed or modified in connection with the revision submitted herein.

## **X. CONCLUSION**

For the reasons stated herein, the Filing Parties respectfully request that the Commission accept the Economic Study Revisions as filed, without condition, suspension, or hearing, to be effective March 31, 2023.

Respectfully submitted,

ISO NEW ENGLAND INC.

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On behalf of ISO-NE

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On behalf of NEPOOL

## **I.2 Rules of Construction; Definitions**

### **I.2.1 Rules of Construction:**

In this Tariff, unless otherwise provided herein:

- (a) words denoting the singular include the plural and vice versa;
- (b) words denoting a gender include all genders;
- (c) references to a particular part, clause, section, paragraph, article, exhibit, schedule, appendix or other attachment shall be a reference to a part, clause, section, paragraph, or article of, or an exhibit, schedule, appendix or other attachment to, this Tariff;
- (d) the exhibits, schedules and appendices attached hereto are incorporated herein by reference and shall be construed with an as an integral part of this Tariff to the same extent as if they were set forth verbatim herein;
- (e) a reference to any statute, regulation, proclamation, ordinance or law includes all statutes, regulations, proclamations, amendments, ordinances or laws varying, consolidating or replacing the same from time to time, and a reference to a statute includes all regulations, policies, protocols, codes, proclamations and ordinances issued or otherwise applicable under that statute unless, in any such case, otherwise expressly provided in any such statute or in this Tariff;
- (f) a reference to a particular section, paragraph or other part of a particular statute shall be deemed to be a reference to any other section, paragraph or other part substituted therefor from time to time;
- (g) a definition of or reference to any document, instrument or agreement includes any amendment or supplement to, or restatement, replacement, modification or novation of, any such document, instrument or agreement unless otherwise specified in such definition or in the context in which such reference is used;
- (h) a reference to any person (as hereinafter defined) includes such person's successors and permitted assigns in that designated capacity;
- (i) any reference to "days" shall mean calendar days unless "Business Days" (as hereinafter defined) are expressly specified;
- (j) if the date as of which any right, option or election is exercisable, or the date upon which any amount is due and payable, is stated to be on a date or day that is not a Business Day, such right, option or election may be exercised, and such amount shall be deemed due and payable, on the next succeeding Business Day with the same effect as if the same was exercised or made on such date or day (without, in the case of any such payment, the payment or accrual of any interest or

other late payment or charge, provided such payment is made on such next succeeding Business Day);

- (k) words such as “hereunder,” “hereto,” “hereof” and “herein” and other words of similar import shall, unless the context requires otherwise, refer to this Tariff as a whole and not to any particular article, section, subsection, paragraph or clause hereof; and a reference to “include” or “including” means including without limiting the generality of any description preceding such term, and for purposes hereof the rule of *ejusdem generis* shall not be applicable to limit a general statement, followed by or referable to an enumeration of specific matters, to matters similar to those specifically mentioned.

### **I.2.2. Definitions:**

In this Tariff, the terms listed in this section shall be defined as described below:

**Active Demand Capacity Resource** is one or more Demand Response Resources located within the same Dispatch Zone, that is registered with the ISO, assigned a unique resource identification number by the ISO, and participates in the Forward Capacity Market to fulfill a Market Participant’s Capacity Supply Obligation pursuant to Section III.13 of Market Rule 1.

**Actual Capacity Provided** is the measure of capacity provided during a Capacity Scarcity Condition, as described in Section III.13.7.2.2 of Market Rule 1.

**Actual Load** is the consumption at the Retail Delivery Point for the hour.

**Additional Resource Blackstart O&M Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Additional Resource Specified-Term Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Additional Resource Standard Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Administrative Costs** are those costs incurred in connection with the review of Applications for transmission service and the carrying out of System Impact Studies and Facilities Studies.

**Administrative Export De-List Bid** is a bid that may be submitted in a Forward Capacity Auction by certain Existing Generating Capacity Resources subject to a multi-year contract to sell capacity outside of the New England Control Area during the associated Capacity Commitment Period, as described in Section III.13.1.2.3.1.4 of Market Rule 1.

**ADR Neutrals** are one or more firms or individuals identified by the ISO with the advice and consent of the Participants Committee that are prepared to act as neutrals in ADR proceedings under Appendix D to Market Rule 1.

**Advance** is defined in Section IV.A.3.2 of the Tariff.

**Affected Party**, for purposes of the ISO New England Billing Policy, is defined in Section 6.3.5 of the ISO New England Billing Policy.

**Affiliate** is any person or entity that controls, is controlled by, or is under common control by another person or entity. For purposes of this definition, "control" means the possession, directly or indirectly, of the authority to direct the management or policies of an entity. A voting interest of ten percent or more shall create a rebuttable presumption of control.

**AGC** is automatic generation control.

**AGC SetPoint** is the desired output signal for a Resource providing Regulation that is produced by the AGC system as frequently as every four seconds.

**AGC SetPoint Deadband** is a deadband expressed in megawatts that is applied to changing values of the AGC SetPoint for generating units.

**Allocated Assessment** is a Covered Entity's right to seek and obtain payment and recovery of its share in any shortfall payments under Section 3.3 or Section 3.4 of the ISO New England Billing Policy.

**Alternative Dispute Resolution (ADR)** is the procedure set forth in Appendix D to Market Rule 1.

**Alternative Technology Regulation Resource (ATRR)** is one or more facilities capable of providing Regulation that have been registered in accordance with the Asset Registration Process. An Alternative Technology Regulation Resource is eligible to participate in the Regulation Market.

**Ancillary Services** are those services that are necessary to support the transmission of electric capacity and energy from resources to loads while maintaining reliable operation of the New England Transmission System in accordance with Good Utility Practice.

**Announced Schedule 1 EA Amount, Announced Schedule 2 EA Amount, Announced Schedule 3 EA Amount** are defined in Section IV.B.2.2 of the Tariff.

**Annual Transmission Revenue Requirements** are the annual revenue requirements of a PTO's PTF or of all PTOs' PTF for purposes of the OATT shall be the amount determined in accordance with Attachment F to the OATT.

**Annual Reconfiguration Transaction** is a bilateral transaction that may be used in accordance with Section III.13.5.4 of Market Rule 1 to specify a price when a Capacity Supply Obligation is transferred using supply offers and demand bids in Annual Reconfiguration Auctions.

**Applicants**, for the purposes of the ISO New England Financial Assurance Policy, are entities applying for Market Participant status or for transmission service from the ISO.

**Application** is a written request by an Eligible Customer for transmission service pursuant to the provisions of the OATT.

**Asset** is a Generator Asset, a Demand Response Asset, a component of an On-Peak Demand Resource or Seasonal Peak Demand Resource, a Load Asset (including an Asset Related Demand), an Alternative Technology Regulation Resource, or a Tie-Line Asset.

**Asset Registration Process** is the ISO business process for registering an Asset.

**Asset Related Demand** is a Load Asset that has been discretely modeled within the ISO's dispatch and settlement systems, settles at a Node, has been registered in accordance with the Asset Registration Process, and is made up of either: (1) one or more individual end-use metered customers receiving service

from the same point or points of electrical supply with an aggregate average hourly load of 1 MW or greater during the 12 months preceding its registration or (2) one or more storage facilities with an aggregate consumption capability of at least 1 MW.

**Asset Related Demand Bid Block-Hours** are Block-Hours assigned to the Lead Market Participant for each Asset Related Demand bid. Blocks of the bid in effect for each hour will be totaled to determine the daily quantity of Asset Related Demand Bid Block-Hours. In the case that a Resource has a Real-Time unit status of “unavailable” for an entire day, that day will not contribute to the quantity of Asset Related Demand Bid Block-Hours. However, if the Resource has at least one hour of the day with a unit status of “available,” the entire day will contribute to the quantity of Asset Related Demand Bid Block-Hours.

**Asset-Specific Going Forward Costs** are the net costs of an asset that is part of an Existing Generating Capacity Resource, calculated for the asset in the same manner as the net costs of Existing Generating Capacity Resources as described in Section III.13.1.2.3.2.1.1.1 (for an asset with a Static De-List Bid or an Export Bid) or Section III.13.1.2.3.2.1.1.2 (for an asset with a Permanent De-List Bid or Retirement De-List Bid).

**Assigned Meter Reader** reports to the ISO the hourly and monthly MWh associated with the Asset. These MWh are used for settlement. The Assigned Meter Reader may designate an agent to help fulfill its Assigned Meter Reader responsibilities; however, the Assigned Meter Reader remains functionally responsible to the ISO.

**Auction Revenue Right (ARR)** is a right to receive FTR Auction Revenues in accordance with Appendix C of Market Rule 1.

**Auction Revenue Right Allocation (ARR Allocation)** is defined in Section 1 of Appendix C of Market Rule 1.

**Auction Revenue Right Holder (ARR Holder)** is an entity which is the record holder of an Auction Revenue Right (excluding an Incremental ARR) in the register maintained by the ISO.

**Authorized Commission** is defined in Section 3.3 of the ISO New England Information Policy.

**Authorized Person** is defined in Section 3.3 of the ISO New England Information Policy.



**Automatic Response Rate** is the response rate, in MW/Minute, at which a Market Participant is willing to have a Regulation Resource change its output or consumption while providing Regulation between the Regulation High Limit and Regulation Low Limit.

**Average Hourly Load Reduction** is either: (i) the sum of the On-Peak Demand Resource's electrical energy reduction during Demand Resource On-Peak Hours in the month divided by the number of Demand Resource On-Peak Hours in the month; or (ii) the sum of the Seasonal Peak Demand Resource's electrical energy reduction during Demand Resource Seasonal Peak Hours in the month divided by the number of Demand Resource Seasonal Peak Hours in the month. The On-Peak Demand Resource's or Seasonal Peak Demand Resource's electrical energy reduction and Average Hourly Load Reduction shall be determined consistent with the resource's Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements, as described in Section III.13.1.4.3 of Market Rule 1 and the ISO New England Manuals.

**Average Hourly Output** is either: (i) the sum of the On-Peak Demand Resource's electrical energy output during Demand Resource On-Peak Hours in the month divided by the number of Demand Resource On-Peak Hours in the month; or (ii) the sum of the Seasonal Peak Demand Resource's electrical energy output during Demand Resource Seasonal Peak Hours in the month divided by the number of Demand Resource Seasonal Peak Hours in the month. Electrical energy output and Average Hourly Output shall be determined consistent with the resource's Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements, as described in Section III.13.1.4.3 of Market Rule 1 and the ISO New England Manuals.

**Backstop Transmission Solution** is a solution proposed: (i) to address a reliability or market efficiency need identified by the ISO in a Needs Assessment reported by the ISO pursuant to Section 4.1(i) of Attachment K to the ISO OATT, (ii) by the PTO or PTOs with an obligation under Schedule 3.09(a) of the TOA to address the identified need; and (iii) in circumstances in which the competitive solution process specified in Section 4.3 of Attachment K to the ISO OATT will be utilized.

**Bankruptcy Code** is the United States Bankruptcy Code.

**Bankruptcy Event** occurs when a Covered Entity files a voluntary or involuntary petition in bankruptcy or commences a proceeding under the United States Bankruptcy Code or any other applicable law concerning insolvency, reorganization or bankruptcy by or against such Covered Entity as debtor.

**Benchmark Scenario** is an [Economic Study reference scenario that is described in Section 17.2\(a\) of Attachment K to the OATT.](#)

**Bilateral Contract (BC)** is any of the following types of contracts: Internal Bilateral for Load, Internal Bilateral for Market for Energy, and External Transactions.

**Bilateral Contract Block-Hours** are Block-Hours assigned to the seller and purchaser of an Internal Bilateral for Load, Internal Bilateral for Market for Energy and External Transactions; provided, however, that only those contracts which apply to the Real-Time Energy Market will accrue Block-Hours.

**Binary Storage DARD** is a DARD that participates in the New England Markets as part of a Binary Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Binary Storage Facility** is a type of Electric Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Blackstart Capability Test** is the test, required by ISO New England Operating Documents, of a resource's capability to provide Blackstart Service.

**Blackstart Capital Payment** is the annual compensation, as calculated pursuant to Section 5.1, or as referred to in Section 5.2, of Schedule 16 to the OATT, for a Designated Blackstart Resource's Blackstart Equipment capital costs associated with the provision of Blackstart Service (excluding the capital costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Blackstart Equipment** is any equipment that is solely necessary to enable the Designated Blackstart Resource to provide Blackstart Service and is not required to provide other products or services under the Tariff.

**Blackstart O&M Payment** is the annual Blackstart O&M compensation calculated under either Section 5.1 or 5.2 of Schedule 16 of the OATT, as applicable.

**Blackstart Owner** is the Market Participant who is authorized on behalf of the Generator Owner(s) to offer or operate the resource as a Designated Blackstart Resource and is authorized to commit the resource to provide Blackstart Service.

**Blackstart Service** is the Ancillary Service described in Section II.47 of the Tariff and Schedule 16 of the OATT.

**Blackstart Service Commitment** is the commitment by a Blackstart Owner for its resource to provide Blackstart Service and the acceptance of that commitment by the ISO, in the manner detailed in ISO New England Operating Procedure No. 11 – Designated Blackstart Resource Administration (OP 11), and which includes a commitment to provide Blackstart Service established under Operating Procedure 11 – Designated Blackstart Resource Administration (OP11).

**Blackstart Service Minimum Criteria** are the minimum criteria that a Blackstart Owner and its resource must meet in order to establish and maintain a resource as a Designated Blackstart Resource.

**Blackstart Standard Rate Payment** is the formulaic rate of monthly compensation, as calculated pursuant to Section 5 of Schedule 16 to the OATT, paid to a Blackstart Owner for the provision of Blackstart Service from a Designated Blackstart Resource.

**Blackstart Station** is comprised of (i) a single Designated Blackstart Resource or (ii) two or more Designated Blackstart Resources that share Blackstart Equipment.

**Blackstart Station-specific Rate Payment** is the Commission-approved compensation, as calculated pursuant to Section 5.2 of Schedule 16 to the OATT, paid to a Blackstart Owner on a monthly basis for the provision of Blackstart Service by Designated Blackstart Resources located at a specific Blackstart Station.

**Blackstart Station-specific Rate Capital Payment** is a component of the Blackstart Station-specific Rate Payment that reflects a Blackstart Station's capital Blackstart Equipment costs associated with the

provision of Blackstart Service (excluding the capital costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Block** is defined as follows: (1) With respect to Bilateral Contracts, a Bilateral Contract administered by the ISO for an hour; (2) with respect to Supply Offers administered by the ISO, a quantity with a related price for Energy (Supply Offers for Energy may contain multiple sets of quantity and price pairs for each hour); (3) with respect to Demand Bids administered by the ISO, a quantity with a related price for Energy (Demand Bids for Energy may contain multiple sets of quantity and price pairs for each hour); (4) with respect to Increment Offers administered by the ISO, a quantity with a related price for Energy (Increment Offers for Energy may contain multiple sets of quantity and price pairs for each hour); (5) with respect to Decrement Bids administered by the ISO, a quantity with a related price for Energy (Decrement Bids for Energy may contain multiple sets of quantity and price pairs for each hour); (6) with respect to Asset Related Demand bids administered by the ISO, a quantity with a related price for Energy (Asset Related Demand bids may contain multiple sets of quantity and price pairs for each hour); and (7) with respect to Demand Reduction Offers administered by the ISO, a quantity of reduced demand with a related price (Demand Reduction Offers may contain multiple sets of quantity and price pairs for the day).

**Block-Hours** are the number of Blocks administered for a particular hour.

**Budget and Finance Subcommittee** is a subcommittee of the Participants Committee, the responsibilities of which are specified in Section 8.4 of the Participants Agreement.

**Business Day** is any day other than a Saturday or Sunday or ISO holidays as posted by the ISO on its website.

**Cancelled Start NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Capability Demonstration Year** is the one year period from September 1 through August 31.

**Capacity Acquiring Resource** is a resource that is seeking to acquire a Capacity Supply Obligation through: (1) a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1, or; (2) an annual or monthly reconfiguration auction, as described in Section III.13.4.

**Capacity Balancing Ratio** is a ratio used in calculating the Capacity Performance Payment in the Forward Capacity Market, as described in Section III.13.7.2.3 of Market Rule 1.

**Capacity Base Payment** is the portion of revenue received in the Forward Capacity Market as described in Section III.13.7.1 of Market Rule 1.

**Capacity Capability Interconnection Standard** has the meaning specified in Schedule 22, Schedule 23, and Schedule 25 of the OATT.

**Capacity Clearing Price** is the clearing price for a Capacity Zone for a Capacity Commitment Period resulting from the Forward Capacity Auction conducted for that Capacity Commitment Period, as determined in accordance with Section III.13.2.7 of Market Rule 1.

**Capacity Commitment Period** is the one-year period from June 1 through May 31 for which obligations are assumed and payments are made in the Forward Capacity Market.

**Capacity Cost (CC)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**Capacity Export Through Import Constrained Zone Transaction** is defined in Section III.1.10.7(f)(i) of Market Rule 1.

**Capacity Load Obligation** is the quantity of capacity for which a Market Participant is financially responsible as described in Section III.13.7.5.2 of Market Rule 1.

**Capacity Load Obligation Acquiring Participant** is a load serving entity or any other Market Participant seeking to acquire a Capacity Load Obligation through a Capacity Load Obligation Bilateral, as described in Section III.13.5.2 of Market Rule 1.

**Capacity Network Import Capability (CNI Capability)** is as defined in Section I of Schedule 25 of the OATT.

**Capacity Network Import Interconnection Service (CNI Interconnection Service)** is as defined in Section I of Schedule 25 of the OATT.

**Capacity Load Obligation Bilateral** is a bilateral contract through which a Market Participant may transfer all or a portion of its Capacity Load Obligation to another entity, as described in Section III.13.5 of Market Rule 1.

**Capacity Load Obligation Transferring Participant** is an entity that has a Capacity Load Obligation and is seeking to shed such obligation through a Capacity Load Obligation Bilateral, as described in Section III.13.5.2 of Market Rule 1.

**Capacity Network Resource (CNR)** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**Capacity Network Resource Interconnection Service (CNR Interconnection Service)** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**Capacity Performance Bilateral** is a transaction for transferring Capacity Performance Score, as described in Section III.13.5.3 of Market Rule 1.

**Capacity Performance Payment** is the performance-dependent portion of revenue received in the Forward Capacity Market, as described in Section III.13.7.2 of Market Rule 1.

**Capacity Performance Payment Rate** is a rate used in calculating Capacity Performance Payments, as described in Section III.13.7.2.5 of Market Rule 1.

**Capacity Performance Score** is a figure used in determining Capacity Performance Payments, as described in Section III.13.7.2.4 of Market Rule 1.

**Capacity Rationing Rule** addresses whether offers and bids in a Forward Capacity Auction may be rationed, as described in Section III.13.2.6 of Market Rule 1.

**Capacity Scarcity Condition** is a period during which performance is measured in the Forward Capacity Market, as described in Section III.13.7.2.1 of Market Rule 1.

**Capacity Scarcity Condition** is a period during which performance is measured in the Forward Capacity Market, as described in Section III.13.7.2.1 of Market Rule 1.

**Capacity Supply Obligation** is an obligation to provide capacity from a resource, or a portion thereof, to satisfy a portion of the Installed Capacity Requirement that is acquired through a Forward Capacity Auction in accordance with Section III.13.2, a reconfiguration auction in accordance with Section III.13.4, or a Capacity Supply Obligation Bilateral in accordance with Section III.13.5.1 of Market Rule 1.

**Capacity Supply Obligation Bilateral** is a bilateral contract through which a Market Participant may transfer all or a part of its Capacity Supply Obligation to another entity, as described in Section III.13.5.1 of Market Rule 1.

**Capacity Transfer Rights (CTRs)** are calculated in accordance with Section III.13.7.5.4.

**Capacity Transferring Resource** is a resource that has a Capacity Supply Obligation and is seeking to shed such obligation, or a portion thereof, through: (1) a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1, or; (2) an annual or monthly reconfiguration auction, as described in Section III.13.4.

**Capacity Zone** is a geographic sub-region of the New England Control Area as determined in accordance with Section III.12.4 of Market Rule 1.

**Capacity Zone Demand Curves** are the demand curves used in the Forward Capacity Market for a Capacity Zone as specified in Sections III.13.2.2.2 and III.13.2.2.3.

**Capital Funding Charge (CFC)** is defined in Section IV.B.2 of the Tariff.

**CARL Data** is Control Area reliability data submitted to the ISO to permit an assessment of the ability of an external Control Area to provide energy to the New England Control Area in support of capacity offered to the New England Control Area by that external Control Area.

**Category B Designated Blackstart Resource** has the same meaning as Designated Blackstart Resource.

**Charge** is a sum of money due from a Covered Entity to the ISO, either in its individual capacity or as billing and collection agent for NEPOOL pursuant to the Participants Agreement.

**CLAIM10** is the value, expressed in megawatts, calculated pursuant to Section III.9.5.3 of the Tariff.

**CLAIM30** is the value, expressed in megawatts, calculated pursuant to Section III.9.5.3 of the Tariff.

**Claimed Capability Audit** is performed to determine the real power output capability of a Generator Asset or the demand reduction capability of a Demand Response Resource.

**Cluster Enabling Transmission Upgrade (CETU)** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Cluster Enabling Transmission Upgrade Regional Planning Study (CRPS)** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Cluster Entry Deadline** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Cluster Interconnection System Impact Study (CSIS)** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Clustering** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**CNR Capability** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**Coincident Peak Contribution** is a Market Participant's share of the New England Control Area coincident peak demand for the prior calendar year as determined prior to the start of each Capacity Commitment Period, which reflects the sum of the prior year's annual coincident peak contributions of the customers served by the Market Participant at each Load Asset. Daily Coincident Peak Contribution values shall be submitted by the Assigned Meter Reader or Host Participant by the meter reading deadline to the ISO.



**Commercial Capacity** is capacity that has achieved FCM Commercial Operation.

**Commission** is the Federal Energy Regulatory Commission.

**Commitment Period** is (i) for a Day-Ahead Energy Market commitment, a period of one or more contiguous hours for which a Resource is cleared in the Day-Ahead Energy Market, and (ii) for a Real-Time Energy Market commitment, the period of time for which the ISO indicates the Resource is being committed when it issues the Dispatch Instruction. If the ISO does not indicate the period of time for which the Resource is being committed in the Real-Time Energy Market, then the Commitment Period is the Minimum Run Time for an offline Resource and one hour for an online Resource.

**Common Costs** are those costs associated with a Station that are avoided only by the clearing of the Static De-List Bids, the Permanent De-List Bids, or the Retirement De-List Bids of all the Existing Generating Capacity Resources comprising the Station.

**Completed Application** is an Application that satisfies all of the information and other requirements of the OATT, including any required deposit.

**Compliance Effective Date** is the date upon which the changes in the predecessor NEPOOL Open Access Transmission Tariff which have been reflected herein to comply with the Commission's Order of April 20, 1998 became effective.

**Composite FCM Transaction** is a transaction for separate resources seeking to participate as a single composite resource in a Forward Capacity Auction in which multiple Designated FCM Participants provide capacity, as described in Section III.13.1.5 of Market Rule 1.

**Conditional Qualified New Resource** is defined in Section III.13.1.1.2.3(f) of Market Rule 1.

**Confidential Information** is defined in Section 2.1 of the ISO New England Information Policy, which is Attachment D to the Tariff.

**Confidentiality Agreement** is Attachment 1 to the ISO New England Billing Policy.

**Congestion** is a condition of the New England Transmission System in which transmission limitations prevent unconstrained regional economic dispatch of the power system. Congestion is the condition that results in the Congestion Component of the Locational Marginal Price at one Location being different from the Congestion Component of the Locational Marginal Price at another Location during any given hour of the dispatch day in the Day-Ahead Energy Market or Real-Time Energy Market.

**Congestion Component** is the component of the nodal price that reflects the marginal cost of congestion at a given Node or External Node relative to the reference point. When used in connection with Zonal Price and Hub Price, the term Congestion Component refers to the Congestion Components of the nodal prices that comprise the Zonal Price and Hub Price weighted and averaged in the same way that nodal prices are weighted to determine Zonal Price and averaged to determine the Hub Price.

**Congestion Cost** is the cost of congestion as measured by the difference between the Congestion Components of the Locational Marginal Prices at different Locations and/or Reliability Regions on the New England Transmission System.

**Congestion Paying LSE** is, for the purpose of the allocation of FTR Auction Revenues to ARR Holders as provided for in Appendix C of Market Rule 1, a Market Participant or Non-Market Participant Transmission Customer that is responsible for paying for Congestion Costs as a Transmission Customer paying for Regional Network Service under the Transmission, Markets and Services Tariff, unless such Transmission Customer has transferred its obligation to supply load in accordance with ISO New England System Rules, in which case the Congestion Paying LSE shall be the Market Participant supplying the transferred load obligation. The term Congestion Paying LSE shall be deemed to include, but not be limited to, the seller of internal bilateral transactions that transfer Real-Time Load Obligations under the ISO New England System Rules.

**Congestion Revenue Fund** is the amount available for payment of target allocations to FTR Holders from the collection of Congestion Cost.

**Congestion Shortfall** means congestion payments exceed congestion charges during the billing process in any billing period.

**Continuous Storage ATRR** is an ATRR that participates in the New England Markets as part of a Continuous Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Continuous Storage DARD** is a DARD that participates in the New England Markets as part of a Continuous Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Continuous Storage Generator Asset** is a Generator Asset that participates in the New England Markets as part of a Continuous Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Continuous Storage Facility** is a type of Electric Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Control Agreement** is the document posted on the ISO website that is required if a Market Participant's cash collateral is to be invested in BlackRock funds.

**Control Area** is an electric power system or combination of electric power systems to which a common automatic generation control scheme is applied in order to:

- (1) match, at all times, the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
- (2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
- (3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice and the criteria of the applicable regional reliability council or the North American Electric Reliability Corporation; and
- (4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Controllable Behind-the-Meter Generation** means generation whose output can be controlled located at the same facility as a DARD or a Demand Response Asset, excluding: (1) generators whose output is separately metered and reported and (2) generators that cannot operate electrically synchronized to, and that are operated only when the facility loses its supply of power from, the New England Transmission System, or when undergoing related testing.

**Coordinated External Transaction** is an External Transaction at an external interface for which the enhanced scheduling procedures in Section III.1.10.7.A are implemented. A transaction to wheel energy into, out of or through the New England Control Area is not a Coordinated External Transaction.

**Coordinated Transaction Scheduling** means the enhanced scheduling procedures set forth in Section III.1.10.7.A.

**Correction Limit** means the date that is one hundred and one (101) calendar days from the last Operating Day of the month to which the data applied. As described in Section III.3.6.1 of Market Rule 1, this will be the period during which meter data corrections must be submitted unless they qualify for submission as a Requested Billing Adjustment under Section III.3.7 of Market Rule 1.

**Cost of Energy Consumed (CEC)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**Cost of Energy Produced (CEP)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**Cost of New Entry (CONE)** is the estimated cost of new entry (\$/kW-month) for a capacity resource that is determined by the ISO for each Forward Capacity Auction pursuant to Section III.13.2.4.

**Counterparty** means the status in which the ISO acts as the contracting party, in its name and own right and not as an agent, to an agreement or transaction with a Customer (including assignments involving Customers) involving sale to the ISO, and/or purchase from the ISO, of Regional Transmission Service and market and other products and services, and other transactions and assignments involving Customers, all as described in the Tariff.

**Covered Entity** is defined in the ISO New England Billing Policy.

**Credit Coverage** is third-party credit protection obtained by the ISO in the form of credit insurance coverage.

**Credit Qualifying** means a Rated Market Participant that has an Investment Grade Rating and an Unrated Market Participant that satisfies the Credit Threshold.

**Credit Threshold** consists of the conditions for Unrated Market Participants outlined in Section II.B.2 of the ISO New England Financial Assurance Policy.

**Critical Energy Infrastructure Information (CEII)** is defined in Section 3.0(j) of the ISO New England Information Policy, which is Attachment D to the Tariff.

**Current Ratio** is, on any date, all of a Market Participant's or Non-Market Participant Transmission Customer's current assets divided by all of its current liabilities, in each case as shown on the most recent financial statements provided by such Market Participant or Non-Market Participant Transmission Customer to the ISO.

**Curtailement** is a reduction in the dispatch of a transaction that was scheduled, using transmission service, in response to a transfer capability shortage as a result of system reliability conditions.

**Customer** is a Market Participant, a Transmission Customer or another customer of the ISO.

**Cyber Security Exigency** is a suspicious or malicious electronic act or event that compromises or attempts to compromise, or disrupts or attempts to disrupt, the ongoing operation of the ISO, the New England Markets, or reliability within the New England Control Area or other electrical facilities directly or indirectly connected to the New England Transmission System and (i) whose severity or nature reasonably requires that the ISO obtain expert assistance not normally called upon to counter such an electronic act or resolve such an event or (ii) whose nature requires the ISO to report such an electronic act or event pursuant to NERC Critical Infrastructure Protection Reliability Standards or applicable regulations promulgated by the Department of Homeland Security, the Department of Energy, or a federal agency with similar cybersecurity responsibilities (or any of their respective successor organizations or agencies).

**Data Reconciliation Process** means the process by which meter reconciliation and data corrections that are discovered by Governance Participants after the Invoice has been issued for a particular month or that are discovered prior to the issuance of the Invoice for the relevant month but not included in that Invoice or in the other Invoices for that month and are reconciled by the ISO on an hourly basis based on data submitted to the ISO by the Host Participant Assigned Meter Reader or Assigned Meter Reader.

**Day-Ahead** is the calendar day immediately preceding the Operating Day.

**Day-Ahead Adjusted Load Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Congestion Revenue** is defined in Section III.3.2.1(i) of Market Rule 1.

**Day-Ahead Demand Reduction Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Energy Market** means the schedule of commitments for the purchase or sale of energy, purchase of demand reductions, payment of Congestion Costs, payment for losses developed by the ISO as a result of the offers and specifications submitted in accordance with Section III.1.10 of Market Rule 1.

**Day-Ahead Energy Market Congestion Charge/Credit** is defined in Section III.3.2.1(f) of Market Rule 1.

**Day-Ahead Energy Market Energy Charge/Credit** is defined in Section III.3.2.1(f) of Market Rule 1.

**Day-Ahead Energy Market Loss Charge/Credit** is defined in Section III.3.2.1(f) of Market Rule 1.

**Day-Ahead Energy Market NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Day-Ahead External Transaction Export and Decrement Bid NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Day-Ahead External Transaction Import and Increment Offer NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Day-Ahead Generation Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Load Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Locational Adjusted Net Interchange** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Loss Charges or Credits** is defined in Section III.3.2.1(k) of Market Rule 1.

**Day-Ahead Loss Revenue** is defined in Section III.3.2.1(j) of Market Rule 1.

**Day-Ahead Prices** means the Locational Marginal Prices resulting from the Day-Ahead Energy Market.

**DDP Dispatchable Resource** is any Dispatchable Resource that the ISO dispatches using Desired Dispatch Points in the Resource's Dispatch Instructions.

**Debt-to-Total Capitalization Ratio** is, on any date, a Market Participant's or Non-Market Participant Transmission Customer's total debt (including all current borrowings) divided by its total shareholders' equity plus total debt, in each case as shown on the most recent financial statements provided by such Market Participant or Non-Market Participant Transmission Customer to the ISO.

**Decrement Bid** means a bid to purchase energy at a specified Location in the Day-Ahead Energy Market which is not associated with a physical load. An accepted Decrement Bid results in scheduled load at the specified Location in the Day-Ahead Energy Market.

**Default Amount** is all or any part of any amount due to be paid by any Covered Entity that the ISO, in its reasonable opinion, believes will not or has not been paid when due (other than in the case of a payment dispute for any amount due for transmission service under the OATT).

**Default Period** is defined in Section 3.3.h(i) of the ISO New England Billing Policy.

**Delivering Party** is the entity supplying capacity and/or energy to be transmitted at Point(s) of Receipt under the OATT.

**Demand Bid** means a request to purchase an amount of energy, at a specified Location, or an amount of energy at a specified price, that is associated with a physical load. A cleared Demand Bid in the Day-Ahead Energy Market results in scheduled load at the specified Location. Demand Bids submitted for use in the Real-Time Energy Market are specific to Dispatchable Asset Related Demands only.

**Demand Bid Block-Hours** are the Block-Hours assigned to the submitting Customer for each Demand Bid.

**Demand Bid Cap** is \$2,000/MWh.

**Demand Capacity Resource** means an Existing Demand Capacity Resource or a New Demand Capacity Resource. There are three Demand Capacity Resource types: Active Demand Capacity Resources, On-Peak Demand Resources, and Seasonal Peak Demand Resources.

**Demand Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for Demand Response Resources in accordance with the provisions set forth in ISO New England Operating Procedure No. 14.

**Demand Reduction Offer** is an offer by a Market Participant with a Demand Response Resource to reduce demand.

**Demand Reduction Offer Block-Hours** are Block-Hours assigned to the Lead Market Participant for each Demand Reduction Offer. Blocks of the Demand Reduction Offer in effect for each hour will be totaled to determine the quantity of Demand Reduction Offer Block-Hours for a given day. In the case that a Resource has a Real-Time unit status of “unavailable” for the entire day, that day will not contribute to the quantity of Demand Reduction Offer Block-Hours. However, if the Resource has at least one hour of the day with a unit status of “available,” the entire day will contribute to the quantity of Demand Reduction Offer Block-Hours.

**Demand Reduction Threshold Price** is a minimum offer price calculated pursuant to Section III.1.10.1A(f).

**Demand Resource On-Peak Hours** are hours ending 1400 through 1700, Monday through Friday on non-Demand Response Holidays during the months of June, July, and August and hours ending 1800 through 1900, Monday through Friday on non-Demand Response Holidays during the months of December and January.

**Demand Resource Seasonal Peak Hours** are those hours in which the actual, real-time hourly load, as measured using real-time telemetry (adjusted for transmission and distribution losses, and excluding load associated with Exports and Storage DARDs) for Monday through Friday on non-Demand Response Holidays, during the months of June, July, August, December, and January, as determined by the ISO, is



equal to or greater than 90% of the most recent 50/50 system peak load forecast, as determined by the ISO, for the applicable summer or winter season.

**Demand Response Asset** is an asset comprising the demand reduction capability of an individual end-use customer at a Retail Delivery Point or the aggregated demand reduction capability of multiple end-use customers from multiple delivery points (as described in Section III.8.1.1(f)) that has been registered in accordance with III.8.1.1.

**Demand Response Available** is the capability of the Demand Response Resource, in whole or in part, at any given time, to reduce demand in response to a Dispatch Instruction.

**Demand Response Baseline** is the expected baseline demand of an individual end-use metered customer or group of end-use metered customers as determined pursuant to Section III.8.2.

**Demand Response Holiday** is New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, and Christmas Day. If the holiday falls on a Saturday, the holiday will be observed on the preceding Friday; if the holiday falls on a Sunday, the holiday will be observed on the following Monday.

**Demand Response Resource** is an individual Demand Response Asset or aggregation of Demand Response Assets within a DRR Aggregation Zone that has been registered in accordance with Section III.8.1.2.

**Demand Response Resource Notification Time** is the period of time between the receipt of a startup Dispatch Instruction and the time the Demand Response Resource starts reducing demand.

**Demand Response Resource Ramp Rate** is the average rate, expressed in MW per minute, at which the Demand Response Resource can reduce demand.

**Demand Response Resource Start-Up Time** is the period of time between the time a Demand Response Resource starts reducing demand at the conclusion of the Demand Response Resource Notification Time and the time the resource can reach its Minimum Reduction and be ready for further dispatch by the ISO.

**Designated Agent** is any entity that performs actions or functions required under the OATT on behalf of the ISO, a Transmission Owner, a Schedule 20A Service Provider, an Eligible Customer, or a Transmission Customer.

**Designated Blackstart Resource** is a resource that meets the eligibility requirements specified in Schedule 16 of the OATT, which includes any resource referred to previously as a Category B Designated Blackstart Resource.

**Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for a Generator Asset and/or Dispatchable Asset Related Demand in accordance with the provisions set forth in ISO New England Operating Procedure No. 14.

**Designated FCM Participant** is any Lead Market Participant, including any Provisional Member that is a Lead Market Participant, transacting in any Forward Capacity Auction, reconfiguration auctions or Capacity Supply Obligation Bilateral for capacity that is otherwise required to provide additional financial assurance under the ISO New England Financial Assurance Policy.

**Designated FTR Participant** is a Market Participant, including FTR-Only Customers, transacting in the FTR Auction that is otherwise required to provide additional financial assurance under the ISO New England Financial Assurance Policy.

**Desired Dispatch Point (DDP)** means the control signal, expressed in megawatts, transmitted to direct the output, consumption, or demand reduction level of each Generator Asset, Dispatchable Asset Related Demand, or Demand Response Resource dispatched by the ISO in accordance with the asset's Offer Data.

**Direct Assignment Facilities** are facilities or portions of facilities that are constructed for the sole use/benefit of a particular Transmission Customer requesting service under the OATT or a Generator Owner requesting an interconnection. Direct Assignment Facilities shall be specified in a separate agreement among the ISO, Interconnection Customer and Transmission Customer, as applicable, and the Transmission Owner whose transmission system is to be modified to include and/or interconnect with the Direct Assignment Facilities, shall be subject to applicable Commission requirements, and shall be paid for by the Customer in accordance with the applicable agreement and the Tariff.

**Directly Metered Assets** are specifically measured by OP-18 compliant metering as currently described in Section IV (Metering and Recording for Settlements) of OP-18. Directly Metered Assets include all Tie-Line Assets, all Generator Assets, as well as some Load Assets. Load Assets for which the Host Participant is not the Assigned Meter Reader are considered Directly Metered Assets. In addition, the Host Participant Assigned Meter Reader determines which additional Load Assets are considered Directly Metered Assets and which ones are considered Profiled Load Assets based upon the Host Participant Assigned Meter Reader reporting systems and process by which the Host Participant Assigned Meter Reader allocates non-PTF losses.

**Disbursement Agreement** is the Rate Design and Funds Disbursement Agreement among the PTOs, as amended and restated from time to time.

**Dispatch Instruction** means directions given by the ISO to Market Participants, which may include instructions to start up, shut down, raise or lower generation, curtail or restore loads from Demand Response Resources, change External Transactions, or change the status or consumption of a Dispatchable Asset Related Demand in accordance with the Supply Offer, Demand Bid, or Demand Reduction Offer parameters. Such instructions may also require a change to the operation of a Pool Transmission Facility. Such instructions are given through either electronic or verbal means.

**Dispatch Zone** means a subset of Nodes located within a Load Zone established by the ISO for each Capacity Commitment Period pursuant to Section III.12.4A.

**Dispatchable Asset Related Demand (DARD)** is an Asset Related Demand that is capable of having its energy consumption modified in Real-Time in response to Dispatch Instructions. A DARD must be capable of receiving and responding to electronic Dispatch Instructions, must be able to increase or decrease energy consumption between its Minimum Consumption Limit and Maximum Consumption Limit in accordance with Dispatch Instructions, and must meet the technical requirements specified in the ISO New England Operating Procedures and Manuals.

**Dispatchable Resource** is any Generator Asset, Dispatchable Asset Related Demand, Demand Response Resource, or, with respect to the Regulation Market only, Alternative Technology Regulation Resource, that, during the course of normal operation, is capable of receiving and responding to electronic Dispatch Instructions in accordance with the parameters contained in the Resource's Supply Offer, Demand Bid, Demand Reduction Offer or Regulation Service Offer. A Resource that is normally classified as a

Dispatchable Resource remains a Dispatchable Resource when it is temporarily not capable of receiving and responding to electronic Dispatch Instructions.

**Dispute Representatives** are defined in 6.5.c of the ISO New England Billing Policy.

**Disputed Amount** is a Covered Entity's disputed amount due on any fully paid monthly Invoice and/or any amount believed to be due or owed on a Remittance Advice, as defined in Section 6 of the ISO New England Billing Policy.

**Disputing Party**, for the purposes of the ISO New England Billing Policy, is any Covered Entity seeking to recover a Disputed Amount.

**Distributed Generation** means generation directly connected to end-use customer load and located behind the end-use customer's Retail Delivery Point that reduces the amount of energy that would otherwise have been produced on the electricity network in the New England Control Area, provided that the facility's Net Supply Capability is (i) less than 5 MW or (ii) less than or equal to the Maximum Facility Load, whichever is greater.

**DRR Aggregation Zone** is a Dispatch Zone entirely within a single Reserve Zone or Rest of System or, where a Dispatch Zone is not entirely within a single Reserve Zone or Rest of System, each portion of the Dispatch Zone demarcated by the Reserve Zone boundary.

**Do Not Exceed (DNE) Dispatchable Generator** is any Generator Asset that is dispatched using Do Not Exceed Dispatch Points in its Dispatch Instructions and meets the criteria specified in Section III.1.11.3(e). Do Not Exceed Dispatchable Generators are Dispatchable Resources.

**Do Not Exceed Dispatch Point** is a Dispatch Instruction indicating a maximum output level that a DNE Dispatchable Generator must not exceed.

**Dynamic De-List Bid** is a bid that may be submitted by Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Capacity Resources in the Forward Capacity Auction below the Dynamic De-List Bid Threshold, as described in Section III.13.2.3.2(d) of Market Rule 1.

**Dynamic De-List Bid Threshold** is the price specified in Section III.13.1.2.3.1.A of Market Rule 1 associated with the submission of Dynamic De-List Bids in the Forward Capacity Auction.

**EA Amount** is defined in Section IV.B.2.2 of the Tariff.

**Early Amortization Charge (EAC)** is defined in Section IV.B.2 of the Tariff.

**Early Amortization Working Capital Charge (EAWCC)** is defined in Section IV.B.2 of the Tariff.

**Early Payment Shortfall Funding Amount (EPSF Amount)** is defined in Section IV.B.2.4 of the Tariff.

**Early Payment Shortfall Funding Charge (EPSFC)** is defined in Section IV.B.2 of the Tariff.

**EAWW Amount** is defined in Section IV.B.2.3 of the Tariff.

**EBITDA-to-Interest Expense Ratio** is, on any date, a Market Participant's or Non-Market Participant Transmission Customer's earnings before interest, taxes, depreciation and amortization in the most recent fiscal quarter divided by that Market Participant's or Non-Market Participant Transmission Customer's expense for interest in that fiscal quarter, in each case as shown on the most recent financial statements provided by such Market Participant or Non-Market Participant Transmission Customer to the ISO.

**Economic Dispatch Point** is the output, reduction, or consumption level to which a Resource would have been dispatched, based on the Resource's Supply Offer, Demand Reduction Offer, or Demand Bid and the Real-Time Price, and taking account of any operating limits, had the ISO not dispatched the Resource to another Desired Dispatch Point.

**Economic Maximum Limit or Economic Max** is the maximum available output, in MW, of a Generator Asset that a Market Participant offers to supply in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the Generator Asset's Offer Data. This represents the highest MW output a Market Participant has offered for a Generator Asset for economic dispatch. A Market Participant must maintain an up-to-date Economic Maximum Limit (and where applicable, must provide the ISO with any telemetry required by ISO New England Operating Procedure No. 18 to allow the ISO to maintain an

updated Economic Maximum Limit) for all hours in which a Generator Asset has been offered into the Day-Ahead Energy Market or Real-Time Energy Market.

**Economic Minimum Limit or Economic Min** is (a) for a Generator Asset with an incremental heat rate, the maximum of: (i) the lowest sustainable output level as specified by physical design characteristics, environmental regulations or licensing limits; and (ii) the lowest sustainable output level at which a one MW increment increase in the output level would not decrease the incremental cost, calculated based on the incremental heat rate, of providing an additional MW of output, and (b) for a Generator Asset without an incremental heat rate, the lowest sustainable output level that is consistent with the physical design characteristics of the Generator Asset and with meeting all environmental regulations and licensing limits, and (c) for a Generator Asset undergoing Facility and Equipment Testing or auditing, the level to which the Generator Asset requests and is approved to operate or is directed to operate for purposes of completing the Facility and Equipment Testing or auditing, and (d) for Non-Dispatchable Resources the output level at which a Market Participant anticipates its Non-Dispatchable Resource will be available to operate based on fuel limitations, physical design characteristics, environmental regulations or licensing limits.

**Economic Study** or Economic Studies ~~is are studies described~~ defined in Section ~~4.1(b)~~ 17 of Attachment K to the OATT that are used to examine situations where potential regulated transmission solutions, market responses, or investments could result in (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of the OATT, (ii) reduced congestion, or (iii) the integration of new resources or loads, or both, on an aggregate or regional basis.

**Effective Offer** is the Supply Offer, Demand Reduction Offer, or Demand Bid that is used for NCPC calculation purposes as specified in Section III.F.1(a).

**EFT** is electronic funds transfer.

**Elective Transmission Upgrade** is defined in Section I of Schedule 25 of the OATT.

**Elective Transmission Upgrade Interconnection Customer** is defined in Schedule 25 of the OATT.

**Electric Reliability Organization (ERO)** is defined in 18 C.F.R. § 39.1.

**Electric Storage Facility** is a storage facility that participates in the New England Markets as described in Section III.1.10.6 of Market Rule 1.

**Eligible Customer** is: (i) Any entity that is engaged, or proposes to engage, in the wholesale or retail electric power business is an Eligible Customer under the OATT. (ii) Any electric utility (including any power marketer), Federal power marketing agency, or any other entity generating electric energy for sale or for resale is an Eligible Customer under the OATT. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by Section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Owner with which that entity is directly interconnected or the distribution company having the service territory in which that entity is located (if that entity is a retail customer) offer the unbundled transmission service or Local Delivery Service, or pursuant to a voluntary offer of such service by the Transmission Owner with which that entity is directly interconnected or the distribution company having the service territory in which that entity is located (if that entity is a retail customer). (iii) Any end user taking or eligible to take unbundled transmission service or Local Delivery Service pursuant to a state requirement that the Transmission Owner with which that end user is directly interconnected or the distribution company having the service territory in which that entity is located (if that entity is a retail customer) offer the transmission service or Local Delivery Service, or pursuant to a voluntary offer of such service by the Transmission Owner with which that end user is directly interconnected, or the distribution company having the service territory in which that entity is located (if that entity is a retail customer) is an Eligible Customer under the OATT.

**Eligible FTR Bidder** is an entity that has satisfied applicable financial assurance criteria, and shall not include the auctioneer, its Affiliates, and their officers, directors, employees, consultants and other representatives.

**Emergency** is an abnormal system condition on the bulk power systems of New England or neighboring Control Areas requiring manual or automatic action to maintain system frequency, or to prevent the involuntary loss of load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property; or a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel; or a condition that requires implementation of Emergency procedures as defined in the ISO New England Manuals.

**Emergency Condition** means an Emergency has been declared by the ISO in accordance with the procedures set forth in the ISO New England Manuals and ISO New England Administrative Procedures.

**Emergency Energy** is energy transferred from one control area operator to another in an Emergency.

**Emergency Minimum Limit or Emergency Min** means the minimum output, in MWs, that a Generator Asset can deliver for a limited period of time without exceeding specified limits of equipment stability and operating permits.

**EMS** is energy management system.

**End-of-Round Price** is the lowest price associated with a round of a Forward Capacity Auction, as described in Section III.13.2.3.1 of Market Rule 1.

**End User Participant** is defined in Section 1 of the Participants Agreement.

**Energy** is power produced in the form of electricity, measured in kilowatthours or megawatthours.

**Energy Administration Service (EAS)** is the service provided by the ISO, as described in Schedule 2 of Section IV.A of the Tariff.

**Energy Component** means the Locational Marginal Price at the reference point.

**Energy Efficiency** is installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that reduce the total amount of electrical energy needed, while delivering a comparable or improved level of end-use service. Such measures include, but are not limited to, the installation of more energy efficient lighting, motors, refrigeration, HVAC equipment and control systems, envelope measures, operations and maintenance procedures, and industrial process equipment.

**Energy Imbalance Service** is the form of Ancillary Service described in Schedule 4 of the OATT.

**Energy Market** is, collectively, the Day-Ahead Energy Market and the Real-Time Energy Market.



**Energy Non-Zero Spot Market Settlement Hours** are the sum of the hours for which the Customer has a positive or negative Real-Time System Adjusted Net Interchange or for which the Customer has a positive or negative Real-Time Demand Reduction Obligation as determined by the ISO settlement process for the Energy Market.

**Energy Offer Floor** is negative \$150/MWh.

**Energy Transaction Units (Energy TUs)** are the sum for the month for a Customer of Bilateral Contract Block-Hours, Demand Bid Block-Hours, Asset Related Demand Bid Block-Hours, Supply Offer Block-Hours, Demand Reduction Offer Block-Hours, and Energy Non-Zero Spot Market Settlement Hours.

**Equipment Damage Reimbursement** is the compensation paid to the owner of a Designated Blackstart Resource as specified in Section 5.5 of Schedule 16 to the OATT.

**Equivalent Demand Forced Outage Rate (EFORD)** means the portion of time a unit is in demand, but is unavailable due to forced outages.

**Estimated Capacity Load Obligation** is, for the purposes of the ISO New England Financial Assurance Policy, a Market Participant's share of Zonal Capacity Obligation from the latest available month, adjusted as appropriate to account for any relevant Capacity Load Obligation Bilaterals, HQICCs, and Self-Supplied FCA Resource designations for the applicable month.

**Establish Claimed Capability Audit** is the audit performed pursuant to Section III.1.5.1.2.

**Excepted Transaction** is a transaction specified in Section II.40 of the Tariff for the applicable period specified in that Section.

**Existing Capacity Qualification Deadline** is a deadline, specified in Section III.13.1.10 of Market Rule 1, for submission of certain qualification materials for the Forward Capacity Auction, as discussed in Section III.13.1 of Market Rule 1.

**Existing Capacity Qualification Package** is information submitted for certain existing resources prior to participation in the Forward Capacity Auction, as described in Section III.13.1 of Market Rule 1.

**Existing Capacity Resource** is any resource that does not meet any of the eligibility criteria to participate in the Forward Capacity Auction as a New Capacity Resource.

**Existing Capacity Retirement Deadline** is a deadline, specified in Section III.13.1.10 of Market Rule 1, for submission of certain qualification materials for the Forward Capacity Auction, as discussed in Section III.13.1 of Market Rule 1.

**Existing Capacity Retirement Package** is information submitted for certain existing resources prior to participation in the Forward Capacity Auction, as described in Section III.13.1 of Market Rule 1.

**Existing Demand Capacity Resource** is a type of Demand Capacity Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.2 of Market Rule 1.

**Existing Generating Capacity Resource** is a type of resource participating in the Forward Capacity Market, as defined in Section III.13.1.2.1 of Market Rule 1.

**Existing Import Capacity Resource** is a type of resource participating in the Forward Capacity Market, as defined in Section III.13.1.3.1 of Market Rule 1.

**Expedited Study Request** is defined in Section II.34.7 of the OATT.

**Export-Adjusted LSR** is as defined in Section III.12.4(b)(ii).

**Export Bid** is a bid that may be submitted by certain resources in the Forward Capacity Auction to export capacity to an external Control Area, as described in Section III.13.1.2.3.1.3 of Market Rule 1.

**Exports** are Real-Time External Transactions, which are limited to sales from the New England Control Area, for exporting energy out of the New England Control Area.

**External Elective Transmission Upgrade (External ETU)** is defined in Section I of Schedule 25 of the OATT.

**External Market Monitor** means the person or entity appointed by the ISO Board of Directors pursuant to Section III.A.1.2 of Appendix A of Market Rule 1 to carry out the market monitoring and mitigation functions specified in Appendix A and elsewhere in Market Rule 1.

**External Node** is a proxy bus or buses used for establishing a Locational Marginal Price for energy received by Market Participants from, or delivered by Market Participants to, a neighboring Control Area or for establishing Locational Marginal Prices associated with energy delivered through the New England Control Area by Non-Market Participants for use in calculating Non-Market Participant Congestion Costs and loss costs.

**External Resource** means a generation resource located outside the metered boundaries of the New England Control Area.

**External Transaction** is the import of external energy into the New England Control Area by a Market Participant or the export of internal energy out of the New England Control Area by a Market Participant in the Day-Ahead Energy Market and/or Real-Time Energy Market, or the wheeling of external energy through the New England Control Area by a Market Participant or a Non-Market Participant in the Real-Time Energy Market.

**External Transaction Cap** is \$2,000/MWh for External Transactions other than Coordinated External Transactions and \$1,000/MWh for Coordinated External Transactions.

**External Transaction Floor** is the Energy Offer Floor for External Transactions other than Coordinated External Transactions and negative \$1,000/MWh for Coordinated External Transactions.

**External Transmission Project** is a transmission project comprising facilities located wholly outside the New England Control Area and regarding which an agreement has been reached whereby New England ratepayers will support all or a portion of the cost of the facilities.

**Facilities Study** is an engineering study conducted pursuant to the OATT by the ISO (or, in the case of Local Service or interconnections to Local Area Facilities as defined in the TOA, by one or more affected PTOs) or some other entity designated by the ISO in consultation with any affected Transmission Owner(s), to determine the required modifications to the PTF and Non-PTF, including the cost and

scheduled completion date for such modifications, that will be required to provide a requested transmission service or interconnection on the PTF and Non-PTF.

**Facility and Equipment Testing** means operation of a Resource to evaluate the functionality of the facility or equipment utilized in the operation of the facility.

**Failure to Maintain Blackstart Capability** is a failure of a Blackstart Owner or Designated Blackstart Resource to meet the Blackstart Service Minimum Criteria or Blackstart Service obligations, but does not include a Failure to Perform During a System Restoration event.

**Failure to Perform During a System Restoration** is a failure of a Blackstart Owner or Designated Blackstart Resource to follow ISO or Local Control Center dispatch instructions or perform in accordance with the dispatch instructions or the Blackstart Service Minimum Criteria and Blackstart Service obligations, described within the ISO New England Operating Documents, during a restoration of the New England Transmission System.

**Fast Start Demand Response Resource** is a Demand Response Resource that meets the following criteria: (i) Minimum Reduction Time does not exceed one hour; (ii) Minimum Time Between Reductions does not exceed one hour; (iii) Demand Response Resource Start-Up Time plus Demand Response Resource Notification Time does not exceed 30 minutes; (iv) has personnel available to respond to Dispatch Instructions or has automatic remote response capability; and (v) is capable of receiving and acknowledging a Dispatch Instruction electronically.

**Fast Start Generator** means a Generator Asset that the ISO can dispatch to an on-line or off-line state through electronic dispatch and that meets the following criteria: (i) Minimum Run Time does not exceed one hour; (ii) Minimum Down Time does not exceed one hour; (iii) cold Notification Time plus cold Start-Up Time does not exceed 30 minutes; (iv) available for dispatch (when it is either in an on-line or off-line state) and manned or has automatic remote dispatch capability; and (v) capable of receiving and acknowledging a start-up or shut-down Dispatch Instruction electronically.

**FCA Cleared Export Transaction** is defined in Section III.1.10.7(f)(ii) of Market Rule 1.

**FCA Qualified Capacity** is the Qualified Capacity that is used in a Forward Capacity Auction.

**FCM Capacity Charge Requirements** are calculated in accordance with Section VII.C of the ISO New England Financial Assurance Policy.

**FCM Charge Rate** is calculated in accordance with Section VII.C of the ISO New England Financial Assurance Policy.

**FCM Commercial Operation** is defined in Section III.13.3.8 of Market Rule 1.

**FCM Deposit** is calculated in accordance with Section VII.B.1 of the ISO New England Financial Assurance Policy.

**FCM Financial Assurance Requirements** are described in Section VII of the ISO New England Financial Assurance Policy.

**Final Forward Reserve Obligation** is calculated in accordance with Section III.9.8(a) of Market Rule 1.

**Financial Assurance Default** results from a Market Participant or Non-Market Participant Transmission Customer's failure to comply with the ISO New England Financial Assurance Policy.

**Financial Assurance Obligations** relative to the ISO New England Financial Assurance Policy are determined in accordance with Section III.A(v) of the ISO New England Financial Assurance Policy.

**Financial Transmission Right (FTR)** is a financial instrument that evidences the rights and obligations specified in Sections III.5.2.2 and III.7 of the Tariff.

**Firm Point-To-Point Service** is service which is arranged for and administered between specified Points of Receipt and Delivery in accordance with Part II.C of the OATT.

**Firm Transmission Service** is Regional Network Service, Through or Out Service, service for Excepted Transactions, firm MTF Service, firm OTF Service, and firm Local Service.

**Flexible DNE Dispatchable Generator** is any DNE Dispatchable Generator that meets the following criteria: (i) Minimum Run Time does not exceed one hour; (ii) Minimum Down Time does not exceed one hour; and (iii) cold Notification Time plus cold Start-Up Time does not exceed 30 minutes.

**Force Majeure** - An event of Force Majeure means any act of God, labor disturbance, act of the public enemy or terrorists, war, invasion, insurrection, riot, fire, storm or flood, ice, explosion, breakage or accident to machinery or equipment, any curtailment, order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond the control of the ISO, a Transmission Owner, a Schedule 20A Service Provider, or a Customer, including without limitation, in the case of the ISO, any action or inaction by a Customer, a Schedule 20A Service Provider, or a Transmission Owner, in the case of a Transmission Owner, any action or inaction by the ISO, any Customer, a Schedule 20A Service Provider, or any other Transmission Owner, in the case of a Schedule 20A Service Provider, any action or inaction by the ISO, any Customer, a Transmission Owner, or any other Schedule 20A Service Provider, and, in the case of a Transmission Customer, any action or inaction by the ISO, a Schedule 20A Service Provider, or any Transmission Owner.

**Forward Capacity Auction (FCA)** is the annual Forward Capacity Market auction process described in Section III.13.2 of Market Rule 1.

**Forward Capacity Auction Starting Price** is calculated in accordance with Section III.13.2.4 of Market Rule 1.

**Forward Capacity Market (FCM)** is the forward market for procuring capacity in the New England Control Area, as described in Section III.13 of Market Rule 1.

**Forward Energy Inventory Election** is the total MWh value for which a Market Participant elects to be compensated at the forward rate in the inventoried energy program as described in Section III.K.1(d) of Market Rule 1.

**Forward LNG Inventory Election** is the portion of a Market Participant's Forward Energy Inventory Election attributed to liquefied natural gas in the inventoried energy program as described in Section III.K.1(d) of Market Rule 1.

**Forward Reserve** means TMNSR and TMOR purchased by the ISO on a forward basis on behalf of Market Participants as provided for in Section III.9 of Market Rule 1.

**Forward Reserve Assigned Megawatts** is the amount of Forward Reserve, in megawatts, that a Market Participant assigns to eligible Forward Reserve Resources to meet its Forward Reserve Obligation as defined in Section III.9.4.1 of Market Rule 1.

**Forward Reserve Auction** is the periodic auction conducted by the ISO in accordance with Section III.9 of Market Rule 1 to procure Forward Reserve.

**Forward Reserve Auction Offers** are offers to provide Forward Reserve to meet system and Reserve Zone requirements as submitted by a Market Participant in accordance with Section III.9.3 of Market Rule 1.

**Forward Reserve Charge** is a Market Participant's share of applicable system and Reserve Zone Forward Reserve costs attributable to meeting the Forward Reserve requirement as calculated in accordance with Section III.9.9 of Market Rule 1.

**Forward Reserve Clearing Price** is the clearing price for TMNSR or TMOR, as applicable, for the system and each Reserve Zone resulting from the Forward Reserve Auction as defined in Section III.9.4 of Market Rule 1.

**Forward Reserve Credit** is the credit received by a Market Participant that is associated with that Market Participant's Final Forward Reserve Obligation as calculated in accordance with Section III.9.8 of Market Rule 1.

**Forward Reserve Delivered Megawatts** are calculated in accordance with Section III.9.6.5 of Market Rule 1.

**Forward Reserve Delivery Period** is defined in Section III.9.1 of Market Rule 1.

**Forward Reserve Failure-to-Activate Megawatts** are calculated in accordance with Section III.9.7.2(a) of Market Rule 1.

**Forward Reserve Failure-to-Activate Penalty** is the penalty associated with a Market Participant's failure to activate Forward Reserve when requested to do so by the ISO and is defined in Section III.9.7.2 of Market Rule 1.

**Forward Reserve Failure-to-Activate Penalty Rate** is specified in Section III.9.7.2 of Market Rule 1.

**Forward Reserve Failure-to-Reserve**, as specified in Section III.9.7.1 of Market Rule 1, occurs when a Market Participant's Forward Reserve Delivered Megawatts for a Reserve Zone in an hour is less than that Market Participant's Forward Reserve Obligation for that Reserve Zone in that hour. Under these circumstances the Market Participant pays a penalty based upon the Forward Reserve Failure-to-Reserve Penalty Rate and that Market Participant's Forward Reserve Failure-to-Reserve Megawatts.

**Forward Reserve Failure-to-Reserve Megawatts** are calculated in accordance with Section III.9.7.1(a) of Market Rule 1.

**Forward Reserve Failure-to-Reserve Penalty** is the penalty associated with a Market Participant's failure to reserve Forward Reserve and is defined in Section III.9.7.1 of Market Rule 1.

**Forward Reserve Failure-to-Reserve Penalty Rate** is specified in Section III.9.7.1(b)(ii) of Market Rule 1.

**Forward Reserve Fuel Index** is the index or set of indices used to calculate the Forward Reserve Threshold Price as defined in Section III.9.6.2 of Market Rule 1.

**Forward Reserve Heat Rate** is the heat rate as defined in Section III.9.6.2 of Market Rule 1 that is used to calculate the Forward Reserve Threshold Price.

**Forward Reserve Market** is a market for forward procurement of two reserve products, Ten-Minute Non-Spinning Reserve (TMNSR) and Thirty-Minute Operating Reserve (TMOR).

**Forward Reserve MWs** are those megawatts assigned to specific eligible Forward Reserve Resources which convert a Forward Reserve Obligation into a Resource-specific obligation.

**Forward Reserve Obligation** is a Market Participant's amount, in megawatts, of Forward Reserve that cleared in the Forward Reserve Auction and adjusted, as applicable, to account for bilateral transactions that transfer Forward Reserve Obligations.



**Forward Reserve Obligation Charge** is defined in Section III.10.4 of Market Rule 1.

**Forward Reserve Offer Cap** is \$9,000/megawatt-month.

**Forward Reserve Payment Rate** is defined in Section III.9.8 of Market Rule 1.

**Forward Reserve Procurement Period** is defined in Section III.9.1 of Market Rule 1.

**Forward Reserve Qualifying Megawatts** refer to all or a portion of a Forward Reserve Resource's capability offered into the Real-Time Energy Market at energy offer prices above the applicable Forward Reserve Threshold Price that are calculated in accordance with Section III.9.6.4 of Market Rule 1.

**Forward Reserve Resource** is a Resource that meets the eligibility requirements defined in Section III.9.5.2 of Market Rule 1 that has been assigned Forward Reserve Obligation by a Market Participant.

**Forward Reserve Threshold Price** is the minimum price at which assigned Forward Reserve Megawatts are required to be offered into the Real-Time Energy Market as calculated in Section III.9.6.2 of Market Rule 1.

**FTR Auction** is the periodic auction of FTRs conducted by the ISO in accordance with Section III.7 of Market Rule 1.

**FTR Auction Revenue** is the revenue collected from the sale of FTRs in FTR Auctions. FTR Auction Revenue is payable to FTR Holders who submit their FTRs for sale in the FTR Auction in accordance with Section III.7 of Market Rule 1 and to ARR Holders and Incremental ARR Holders in accordance with Appendix C of Market Rule 1.

**FTR Credit Test Percentage** is calculated in accordance with Section III.B.1(b) of the ISO New England Financial Assurance Policy.

**FTR Financial Assurance Requirements** are described in Section VI of the ISO New England Financial Assurance Policy.

**FTR Holder** is an entity that acquires an FTR through the FTR Auction to Section III.7 of Market Rule 1 and registers with the ISO as the holder of the FTR in accordance with Section III.7 of Market Rule 1 and applicable ISO New England Manuals.

**FTR-Only Customer** is a Market Participant that transacts in the FTR Auction and that does not participate in other markets or programs of the New England Markets. References in this Tariff to a “Non-Market Participant FTR Customers” and similar phrases shall be deemed references to an FTR-Only Customer.

**FTR Settlement Risk Financial Assurance** is an amount of financial assurance required by a Designated FTR Participant for each bid submission into an FTR Auction and for each bid awarded to the individual participant in an FTR Auction. This amount is calculated pursuant to Section VI.A of the ISO New England Financial Assurance Policy.

**GADS Data** means data submitted to the NERC for collection into the NERC’s Generating Availability Data System (GADS).

**Gap Request for Proposals (Gap RFP)** is defined in Section III.11 of Market Rule 1.

**Gas Day** means a period of 24 consecutive hours beginning at 0900 hrs Central Time.

**Generating Capacity Resource** means a New Generating Capacity Resource or an Existing Generating Capacity Resource.

**Generator Asset** is a device (or a collection of devices) that is capable of injecting real power onto the grid that has been registered as a Generator Asset in accordance with the Asset Registration Process.

**Generator Imbalance Service** is the form of Ancillary Service described in Schedule 10 of the OATT.

**Generator Interconnection Related Upgrade** is an addition to or modification of the New England Transmission System (pursuant to Section II.47.1, Schedule 22 or Schedule 23 of the OATT) to effect the interconnection of a new generating unit or an existing generating unit whose energy capability or capacity capability is being materially changed and increased whether or not the interconnection is being effected to meet the Capacity Capability Interconnection Standard or the Network Capability

Interconnection Standard. As to Category A Projects (as defined in Schedule 11 of the OATT), a Generator Interconnection Related Upgrade also includes an upgrade beyond that required to satisfy the Network Capability Interconnection Standard (or its predecessor) for which the Generator Owner has committed to pay prior to October 29, 1998.

**Generator Owner** is the owner, in whole or part, of a generating unit whether located within or outside the New England Control Area.

**Good Utility Practice** means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather includes all acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act Section 215(a)(4).

**Governance Only Member** is defined in Section 1 of the Participants Agreement.

**Governance Participant** is defined in the Participants Agreement.

**Governing Documents**, for the purposes of the ISO New England Billing Policy, are the Transmission, Markets and Services Tariff and ISO Participants Agreement.

**Governing Rating** is the lowest corporate rating from any Rating Agency for that Market Participant, or, if the Market Participant has no corporate rating, then the lowest rating from any Rating Agency for that Market Participant's senior unsecured debt.

**Grandfathered Agreements (GAs)** is a transaction specified in Section II.45 for the applicable period specified in that Section.

**Grandfathered Intertie Agreement (GIA)** is defined pursuant to the TOA.

**Handy-Whitman Index of Public Utility Construction Costs** is the Total Other Production Plant index shown in the Cost Trends of Electric Utility Construction for the North Atlantic Region as published in the Handy-Whitman Index of Public Utility Construction Costs.

**Highgate Transmission Facilities (HTF)** are existing U. S.-based transmission facilities covered under the Agreement for Joint Ownership, Construction and Operation of the Highgate Transmission Interconnection dated as of August 1, 1984 including (1) the whole of a 200 megawatt high-voltage, back-to-back, direct-current converter facility located in Highgate, Vermont and (2) a 345 kilovolt transmission line within Highgate and Franklin, Vermont (which connects the converter facility at the U.S.-Canadian border to a Hydro-Quebec 120 kilovolt line in Bedford, Quebec). The HTF include any upgrades associated with increasing the capacity or changing the physical characteristics of these facilities as defined in the above stated agreement dated August 1, 1984 until the Operations Date, as defined in the TOA. The current HTF rating is a nominal 225 MW. The HTF are not defined as PTF. Coincident with the Operations Date and except as stipulated in Schedules, 9, 12, and Attachment F to the OATT, HTF shall be treated in the same manner as PTF for purposes of the OATT and all references to PTF in the OATT shall be deemed to apply to HTF as well. The treatment of the HTF is not intended to establish any binding precedent or presumption with regard to the treatment for other transmission facilities within the New England Transmission System (including HVDC, MTF, or Control Area Interties) for purposes of the OATT.

**Host Participant or Host Utility** is a Market Participant or a Governance Participant transmission or distribution provider that reconciles the loads within the metering domain with OP-18 compliant metering.

**Hourly Charges** are defined in Section 1.3 of the ISO New England Billing Policy.

**Hourly Requirements** are determined in accordance with Section III.A(i) of the ISO New England Financial Assurance Policy.

**Hourly Shortfall NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Hub** is a specific set of pre-defined Nodes for which a Locational Marginal Price will be calculated for the Day-Ahead Energy Market and Real-Time Energy Market and which can be used to establish a

reference price for energy purchases and the transfer of Day-Ahead Adjusted Load Obligations and Real-Time Adjusted Load Obligations and for the designation of FTRs.

**Hub Price** is calculated in accordance with Section III.2.8 of Market Rule 1.

**HQ Interconnection Capability Credit (HQICC)** is a monthly value reflective of the annual installed capacity benefits of the Phase I/II HVDC-TF, as determined by the ISO, using a standard methodology on file with the Commission, in conjunction with the setting of the Installed Capacity Requirement. An appropriate share of the HQICC shall be assigned to an IRH if the Phase I/II HVDC-TF support costs are paid by that IRH and such costs are not included in the calculation of the Regional Network Service rate. The share of HQICC allocated to such an eligible IRH for a month is the sum in kilowatts of (1)(a) the IRH's percentage share, if any, of the Phase I Transfer Capability times (b) the Phase I Transfer Credit, plus (2)(a) the IRH's percentage share, if any, of the Phase II Transfer Capability, times (b) the Phase II Transfer Credit. The ISO shall establish appropriate HQICCs to apply for an IRH which has such a percentage share.

**Import Capacity Resource** means an Existing Import Capacity Resource or a New Import Capacity Resource offered to provide capacity in the New England Control Area from an external Control Area.

**Inadvertent Energy Revenue** is defined in Section III.3.2.1(o) of Market Rule 1.

**Inadvertent Energy Revenue Charges or Credits** is defined in Section III.3.2.1(p) of Market Rule 1.

**Inadvertent Interchange** means the difference between net actual energy flow and net scheduled energy flow into or out of the New England Control Area.

**Increment Offer** means an offer to sell energy at a specified Location in the Day-Ahead Energy Market which is not associated with a physical supply. An accepted Increment Offer results in scheduled supply at the specified Location in the Day-Ahead Energy Market.

**Incremental ARR** is an ARR provided in recognition of a participant-funded transmission system upgrade pursuant to Appendix C of this Market Rule.

**Incremental ARR Holder** is an entity which is the record holder of an Incremental Auction Revenue Right in the register maintained by the ISO.

**Incremental Cost of Reliability Service** is described in Section III.13.2.5.2.5.2 of Market Rule 1.

**Independent Transmission Company (ITC)** is a transmission entity that assumes certain responsibilities in accordance with Section 10.05 of the Transmission Operating Agreement and Attachment M to the OATT, subject to the acceptance or approval of the Commission and a finding of the Commission that the transmission entity satisfies applicable independence requirements.

**Information Request** is a request from a potential Disputing Party submitted in writing to the ISO for access to Confidential Information.

**Initial Market Participant Financial Assurance Requirement** is calculated for new Market Participants and Returning Market Participants, other than an FTR-Only Customer or a Governance Only Member, according to Section IV of the ISO New England Financial Assurance Policy.

**Installed Capacity Requirement** means the level of capacity required to meet the reliability requirements defined for the New England Control Area, as described in Section III.12 of Market Rule 1.

**Interchange Transactions** are transactions deemed to be effected under Market Rule 1.

**Interconnecting Transmission Owner** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Interconnection Agreement** is the “Large Generator Interconnection Agreement”, the “Small Generator Interconnection Agreement”, or the “Elective Transmission Upgrade Interconnection Agreement” pursuant to Schedules 22, 23 or 25 of the ISO OATT or an interconnection agreement approved by the Commission prior to the adoption of the Interconnection Procedures.

**Interconnection Customer** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Interconnection Feasibility Study Agreement** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, or Section I of Schedule 25 of the OATT.

**Interconnection Procedure** is the “Large Generator Interconnection Procedures”, the “Small Generator Interconnection Procedures”, or the “Elective Transmission Upgrade Interconnection Procedures” pursuant to Schedules 22, 23, and 25 of the ISO OATT.

**Interconnection Reliability Operating Limit (IROL)** has the meaning specified in the Glossary of Terms Used in NERC Reliability Standards.

**Interconnection Request** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, or Section I of Schedule 25 of the OATT.

**Interconnection Rights Holder(s) (IRH)** has the meaning given to it in Schedule 20A to Section II of this Tariff.

**Interconnection System Impact Study Agreement** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23 and Section I of Schedule 25 of the OATT.

**Interest** is interest calculated in the manner specified in Section II.8.3.

**Interface Bid** is a unified real-time bid to simultaneously purchase and sell energy on each side of an external interface for which the enhanced scheduling procedures in Section III.1.10.7.A are implemented.

**Intermittent Power Resource** is a wind, solar, run of river hydro or other renewable resource that does not have control over its net power output.

**Internal Bilateral for Load** is an internal bilateral transaction under which the buyer receives a reduction in Real-Time Load Obligation and the seller receives a corresponding increase in Real-Time Load Obligation in the amount of the sale, in MWs. An Internal Bilateral for Load transaction is only applicable in the Real-Time Energy Market.

**Internal Bilateral for Market for Energy** is an internal bilateral transaction for Energy which applies in the Day-Ahead Energy Market and Real-Time Energy Market or just the Real-Time Energy Market under

which the buyer receives a reduction in Day-Ahead Adjusted Load Obligation and Real-Time Adjusted Load Obligation and the seller receives a corresponding increase in Day-Ahead Adjusted Load Obligation and Real-Time Adjusted Load Obligation in the amount of the sale, in MWs.

**Internal Elective Transmission Upgrade (Internal ETU)** is defined in Section I of Schedule 25 of the OATT.

**Internal Market Monitor** means the department of the ISO responsible for carrying out the market monitoring and mitigation functions specified in Appendix A and elsewhere in Market Rule 1.

**Interregional Planning Stakeholder Advisory Committee (IPSAC)** is the committee described as such in the Northeast Planning Protocol.

**Interregional Transmission Project** is a transmission project located within the New England Control Area and one or more of the neighboring transmission planning regions.

**Interruption Cost** is the amount, in dollars, that must be paid to a Market Participant each time the Market Participant's Demand Response Resource is scheduled or dispatched in the New England Markets to reduce demand.

**Inventoried Energy Day** is an Operating Day that occurs in the months of December, January, or February during the winters of 2023-2024 and 2024-2025 (inventoried energy program) and for which the average of the high temperature and the low temperature on that Operating Day, as measured and reported by the National Weather Service at Bradley International Airport in Windsor Locks, Connecticut, is less than or equal to 17 degrees Fahrenheit, as described in Section III.K.3.1 of Market Rule 1.

**Investment Grade Rating**, for a Market (other than an FTR-Only Customer) or Non-Market Participant Transmission Customer, is either (a) a corporate investment grade rating from one or more of the Rating Agencies, or (b) if the Market Participant or Non-Market Participant Transmission Customer does not have a corporate rating from one of the Rating Agencies, then an investment grade rating for the Market Participant's or Non-Market Participant Transmission Customer's senior unsecured debt from one or more of the Rating Agencies.



**Invoice** is a statement issued by the ISO for the net Charge owed by a Covered Entity pursuant to the ISO New England Billing Policy.

**Invoice Date** is the day on which the ISO issues an Invoice.

**ISO** means ISO New England Inc.

**ISO Charges**, for the purposes of the ISO New England Billing Policy, are both Non-Hourly Charges and Hourly Charges.

**ISO Control Center** is the primary control center established by the ISO for the exercise of its Operating Authority and the performance of functions as an RTO.

**ISO-Initiated Claimed Capability Audit** is the audit performed pursuant to Section III.1.5.1.4.

**ISO New England Administrative Procedures** means procedures adopted by the ISO to fulfill its responsibilities to apply and implement ISO New England System Rules.

**ISO New England Billing Policy** is Exhibit ID to Section I of the Transmission, Markets and Services Tariff.

**ISO New England Filed Documents** means the Transmission, Markets and Services Tariff, including but not limited to Market Rule 1, the Participants Agreement, the Transmission Operating Agreement or other documents that affect the rates, terms and conditions of service.

**ISO New England Financial Assurance Policy** is Exhibit IA to Section I of the Transmission, Markets and Services Tariff.

**ISO New England Information Policy** is the policy establishing guidelines regarding the information received, created and distributed by Market Participants and the ISO in connection with the settlement, operation and planning of the System, as the same may be amended from time to time in accordance with the provisions of this Tariff. The ISO New England Information Policy is Attachment D to the Transmission, Markets and Services Tariff.

**ISO New England Manuals** are the manuals implementing Market Rule 1, as amended from time to time in accordance with the Participants Agreement. Any elements of the ISO New England Manuals that substantially affect rates, terms, and/or conditions of service shall be filed with the Commission under Section 205 of the Federal Power Act.

**ISO New England Operating Documents** are the Tariff and the ISO New England Operating Procedures.

**ISO New England Operating Procedures (OPs)** are the ISO New England Planning Procedures and the operating guides, manuals, procedures and protocols developed and utilized by the ISO for operating the ISO bulk power system and the New England Markets.

**ISO New England Planning Procedures** are the procedures developed and utilized by the ISO for planning the ISO bulk power system.

**ISO New England System Rules** are Market Rule 1, the ISO New England Information Policy, the ISO New England Administrative Procedures, the ISO New England Manuals and any other system rules, procedures or criteria for the operation of the New England Transmission System and administration of the New England Markets and the Transmission, Markets and Services Tariff.

**ITC Agreement** is defined in Attachment M to the OATT.

**ITC Rate Schedule** is defined in Section 3.1 of Attachment M to the OATT.

**ITC System** is defined in Section 2.2 of Attachment M to the OATT.

**ITC System Planning Procedures** is defined in Section 15.4 of Attachment M to the OATT.

**Joint ISO/RTO Planning Committee (JIPC)** is the committee described as such in the Northeastern Planning Protocol.

**Late Payment Account** is a segregated interest-bearing account into which the ISO deposits Late Payment Charges due from ISO Charges and interest owed from participants for late payments that are collected and not distributed to the Covered Entities, until the Late Payment Account Limit is reached,

under the ISO New England Billing Policy and penalties collected under the ISO New England Financial Assurance Policy.

**Late Payment Account Limit** is defined in Section 4.2 of the ISO New England Billing Policy.

**Late Payment Charge** is defined in Section 4.1 of the ISO New England Billing Policy.

**Lead Market Participant**, for purposes other than the Forward Capacity Market, is the entity authorized to submit Supply Offers, Demand Bids or Demand Reduction Offers for a Resource and to whom certain Energy TUs are assessed under Schedule 2 of Section IV.A of the Tariff. For purposes of the Forward Capacity Market, the Lead Market Participant is the entity designated to participate in that market on behalf of an Existing Capacity Resource or a New Capacity Resource.

**Limited Energy Resource** means a Generator Asset that, due to design considerations, environmental restriction on operations, cyclical requirements, such as the need to recharge or refill or manage water flow, or fuel limitations, are unable to operate continuously at full output on a daily basis.

**Load Asset** means a physical load that has been registered in accordance with the Asset Registration Process. A Load Asset can be an Asset Related Demand, including a Dispatchable Asset Related Demand.

**Load Management** means measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that curtail electrical usage or shift electrical usage while delivering a comparable or acceptable level of end-use service. Such measures include, but are not limited to, energy management systems, load control end-use cycling, load curtailment strategies, and energy storage that curtails or shifts electrical usage by means other than generating electricity.

**Load Shedding** is the systematic reduction of system demand by temporarily decreasing load.

**Load Zone** is a Reliability Region, except as otherwise provided for in Section III.2.7 of Market Rule 1.

**Local Area Facilities** are defined in the TOA.

**Local Benefit Upgrade(s) (LBU)** is an upgrade, modification or addition to the transmission system that is: (i) rated below 115kV or (ii) rated 115kV or above and does not meet all of the non-voltage criteria for PTF classification specified in the OATT.

**Local Control Centers** are those control centers in existence as of the effective date of the OATT (including the CONVEX, REMVEC, Maine and New Hampshire control centers) or established by the PTOs in accordance with the TOA that are separate from the ISO Control Center and perform certain functions in accordance with the OATT and the TOA.

**Local Delivery Service** is the service of delivering electric energy to end users. This service is subject to state jurisdiction regardless of whether such service is provided over local distribution or transmission facilities. An entity that is an Eligible Customer under the OATT is not excused from any requirements of state law, or any order or regulation issued pursuant to state law, to arrange for Local Delivery Service with the Participating Transmission Owner and/or distribution company providing such service and to pay all applicable charges associated with such service, including charges for stranded costs and benefits.

**Local Network** is defined as the transmission facilities constituting a local network as identified in Attachment E, as such Attachment may be modified from time to time in accordance with the Transmission Operating Agreement.

**Local Network Load** is the load that a Network Customer designates for Local Network Service under Schedule 21 to the OATT.

**Local Network RNS Rate** is the rate applicable to Regional Network Service to effect a delivery to load in a particular Local Network, as determined in accordance with Schedule 9 to the OATT.

**Local Network Service (LNS)** is the network service provided under Schedule 21 and the Local Service Schedules to permit the Transmission Customer to efficiently and economically utilize its resources to serve its load.

**Local Point-To-Point Service (LPTP)** is Point-to-Point Service provided under Schedule 21 of the OATT and the Local Service Schedules to permit deliveries to or from an interconnection point on the PTF.

**Local Public Policy Transmission Upgrade** is any addition and/or upgrade to the New England Transmission System with a voltage level below 115kV that is required in connection with the construction of a Public Policy Transmission Upgrade approved for inclusion in the Regional System Plan pursuant to Attachment K to the ISO OATT or included in a Local System Plan in accordance with Appendix 1 to Attachment K.

**Local Resource Adequacy Requirement** is calculated pursuant to Section III.12.2.1.1.

**Local Second Contingency Protection Resources** are those Resources identified by the ISO on a daily basis as necessary for the provision of Operating Reserve requirements and adherence to NERC, NPCC and ISO reliability criteria over and above those Resources required to meet first contingency reliability criteria within a Reliability Region.

**Local Service** is transmission service provided under Schedule 21 and the Local Service Schedules thereto.

**Local Service Schedule** is a PTO-specific schedule to the OATT setting forth the rates, charges, terms and conditions applicable to Local Service.

**Local Sourcing Requirement (LSR)** is a value calculated as described in Section III.12.2.1 of Market Rule 1.

**Local System Planning (LSP)** is the process defined in Appendix 1 of Attachment K to the OATT.

**Localized Costs** are costs that the ISO, with advisory input from the Reliability Committee, determines in accordance with Schedule 12C of the OATT shall not be included in the Pool-Supported PTF costs recoverable under this OATT, or in costs allocated to Regional Network Load according to Section 6 of Schedule 12. If there are any Localized Costs, the ISO shall identify them in the Regional System Plan.

**Location** is a Node, External Node, Load Zone, DRR Aggregation Zone, or Hub.

**Locational Marginal Price (LMP)** is defined in Section III.2 of Market Rule 1. The Locational Marginal Price for a Node is the nodal price at that Node; the Locational Marginal Price for an External Node is the nodal price at that External Node; the Locational Marginal Price for a Load Zone, DRR

Aggregation Zone or Reliability Region is the Zonal Price for that Load Zone, DRR Aggregation Zone or Reliability Region, respectively; and the Locational Marginal Price for a Hub is the Hub Price for that Hub.

**Long Lead Time Facility (Long Lead Facility)** has the meaning specified in Section I of Schedule 22 and Schedule 25 of the OATT.

**Long-Term** is a term of one year or more.

**Long-Term Transmission Outage** is a long-term transmission outage scheduled in accordance with ISO New England Operating Procedure No. 3.

**Longer-Term Transmission Study** is a study conducted by the ISO pursuant to the process set out in Section 16 of Attachment K of the OATT. The 2050 Transmission Study shall be the first Longer-Term Transmission Study.

**Loss Component** is the component of the nodal LMP at a given Node or External Node on the PTF that reflects the cost of losses at that Node or External Node relative to the reference point. The Loss Component of the nodal LMP at a given Node on the non-PTF system reflects the relative cost of losses at that Node adjusted as required to account for losses on the non-PTF system already accounted for through tariffs associated with the non-PTF. When used in connection with Hub Price or Zonal Price, the term Loss Component refers to the Loss Components of the nodal LMPs that comprise the Hub Price or Zonal Price, which Loss Components are averaged or weighted in the same way that nodal LMPs are averaged to determine Hub Price or weighted to determine Zonal Price.

**Loss of Load Expectation (LOLE)** is the probability of disconnecting non-interruptible customers due to a resource deficiency.

**Lost Opportunity Cost (LOC)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**LSE** means load serving entity.

**Lump Sum Blackstart Payment** is defined and calculated as specified in Section 5.4 of Schedule 16 to the OATT.

**Lump Sum Blackstart Capital Payment** is defined and calculated as specified in Section 5.4 of Schedule 16 to the OATT.

**Manual Response Rate** is the rate, in MW/Minute, at which the output of a Generator Asset, or the consumption of a Dispatchable Asset Related Demand, is capable of changing.

**Marginal Loss Revenue Load Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Marginal Reliability Impact** is the change, with respect to an increment of capacity supply, in expected unserved energy due to resource deficiency, as measured in hours per year.

**Market Credit Limit** is a credit limit for a Market Participant's Financial Assurance Obligations (except FTR Financial Assurance Requirements) established for each Market Participant in accordance with Section II.C of the ISO New England Financial Assurance Policy.

**Market Credit Test Percentage** is calculated in accordance with Section III.B.1(a) of the ISO New England Financial Assurance Policy.

**Market Efficiency Needs Scenario** is an Economic Study reference scenario that is described in Section 17.2(b) of Attachment K to the OATT.

**Market Efficiency Transmission Upgrade** is defined as those additions and upgrades that are not related to the interconnection of a generator, and, in the ISO's determination, are designed to reduce bulk power system costs to load system-wide, where the net present value of the reduction in bulk power system costs to load system-wide exceeds the net present value of the cost of the transmission addition or upgrade. For purposes of this definition, the term "bulk power system costs to load system-wide" includes, but is not limited to, the costs of energy, capacity, reserves, losses and impacts on bilateral prices for electricity.

**Market Participant** is a participant in the New England Markets (including a FTR-Only Customer) that has executed a Market Participant Service Agreement, or on whose behalf an unexecuted Market Participant Service Agreement has been filed with the Commission.

**Market Participant Financial Assurance Requirement** is defined in Section III of the ISO New England Financial Assurance Policy.

**Market Participant Service Agreement (MPSA)** is an agreement between the ISO and a Market Participant, in the form specified in Attachment A or Attachment A-1 to the Tariff, as applicable.

**Market Rule 1** is ISO Market Rule 1 and appendices set forth in Section III of this ISO New England Inc. Transmission, Markets and Services Tariff, as it may be amended from time to time.

**Market Violation** is a tariff violation, violation of a Commission-approved order, rule or regulation, market manipulation, or inappropriate dispatch that creates substantial concerns regarding unnecessary market inefficiencies.

**Material Adverse Change** is any change in financial status including, but not limited to a downgrade to below an Investment Grade Rating by any Rating Agency, being placed on credit watch with negative implication by any Rating Agency if the Market Participant or Non-Market Participant Transmission Customer does not have an Investment Grade Rating, a bankruptcy filing or other insolvency, a report of a significant quarterly loss or decline of earnings, the resignation of key officer(s), the sanctioning of the Market Participant or Non-Market Participant Transmission Customer or any of its Principles imposed by the Federal Energy Regulatory Commission, the Securities Exchange Commission, any exchange monitored by the National Futures Association, or any state entity responsible for regulating activity in energy markets; the filing of a material lawsuit that could materially adversely impact current or future financial results; a significant change in the Market Participant's or Non-Market Participant Transmission Customer's credit default spreads; or a significant change in market capitalization.

**Material Adverse Impact** is defined, for purposes of review of ITC-proposed plans, as a proposed facility or project will be deemed to cause a "material adverse impact" on facilities outside of the ITC System if: (i) the proposed facility or project causes non-ITC facilities to exceed their capabilities or exceed their thermal, voltage or stability limits, consistent with all applicable reliability criteria, or (ii) the proposed facility or project would not satisfy the standards set forth in Section I.3.9 of the Transmission,



Markets and Services Tariff. This standard is intended to assure the continued service of all non-ITC firm load customers and the ability of the non-ITC systems to meet outstanding transmission service obligations.

**Maximum Capacity Limit** is a value calculated as described in Section III.12.2.2 of Market Rule 1.

**Maximum Consumption Limit** is the maximum amount, in MW, available for economic dispatch from a DARD and is based on the physical characteristics as submitted as part of the DARD's Offer Data. A Market Participant must maintain an up-to-date Maximum Consumption Limit (and where applicable, must provide the ISO with any telemetry required by ISO New England Operating Procedure No. 18 to allow the ISO to maintain an updated Maximum Consumption Limit) for all hours in which a DARD has been offered into the Day-Ahead Energy Market or Real-Time Energy Market.

**Maximum Daily Consumption Limit** is the maximum amount of megawatt-hours that a Storage DARD expects to be able to consume in the next Operating Day.

**Maximum Facility Load** is the highest demand of an end-use customer facility since the start of the prior calendar year (or, if unavailable, an estimate thereof), where the demand evaluated is established by adding metered demand measured at the Retail Delivery Point and the output of all generators located behind the Retail Delivery Point in the same time intervals.

**Maximum Interruptible Capacity** is an estimate of the maximum demand reduction and Net Supply that a Demand Response Asset can deliver, as measured at the Retail Delivery Point.

**Maximum Load** is the highest demand since the start of the prior calendar year (or, if unavailable, an estimate thereof), as measured at the Retail Delivery Point.

**Maximum Number of Daily Starts** is the maximum number of times that a Binary Storage DARD or a Generator Asset can be started or that a Demand Response Resource can be interrupted in the next Operating Day under normal operating conditions.

**Maximum Reduction** is the maximum available demand reduction, in MW, of a Demand Response Resource that a Market Participant offers to deliver in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the Demand Response Resource's Demand Reduction Offer.

**Measure Life** is the estimated time an On-Peak Demand Resource or Seasonal Peak Demand Resource measure will remain in place, or the estimated time period over which the facility, structure, equipment or system in which a measure is installed continues to exist, whichever is shorter. Suppliers of On-Peak Demand Resources or Seasonal Peak Demand Resources comprised of an aggregation of measures with varied Measures Lives shall determine and document the Measure Life either: (i) for each type of measure with a different Measure Life and adjust the aggregate performance based on the individual measure life calculation in the portfolio; or (ii) as the average Measure Life for the aggregated measures as long as the demand reduction capability of the resource is greater than or equal to the amount that cleared in the Forward Capacity Auction or reconfiguration auction for the entire Capacity Commitment Period, and the demand reduction capability for an Existing On-Peak Demand Resource or Existing Seasonal Peak Demand Resource is not over-stated in a subsequent Capacity Commitment Period. Measure Life shall be determined consistent with the resource's Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements of Market Rule 1 and the ISO New England Manuals.

**Measurement and Verification Documents** mean the measurement and verification documents described in Section 13.1.4.3.1 of Market Rule 1 that are submitted by On-Peak Demand Resources and Seasonal Peak Demand Resources, which include Measurement and Verification Plans, Updated Measurement and Verification Plans, Measurement and Verification Summary Reports, and Measurement and Verification Reference Reports.

**Measurement and Verification Plan** means the measurement and verification plan submitted by an On-Peak Demand Resource or Seasonal Peak Demand Resource as part of the qualification process for the Forward Capacity Auction pursuant to the requirements of Section III.13.1.4.3 of Market Rule 1 and the ISO New England Manuals.

**Measurement and Verification Reference Reports** are optional reports submitted by On-Peak Demand Resources or Seasonal Peak Demand Resources during the Capacity Commitment Period subject to the schedule in the Measurement and Verification Plan and consistent with the schedule and reporting standards set forth in the ISO New England Manuals. Measurement and Verification Reference Reports update the prospective demand reduction capability of the On-Peak Demand Resource or Seasonal Peak Demand Resource project based on measurement and verification studies performed during the Capacity Commitment Period.

**Measurement and Verification Summary Report** is the monthly report submitted by an On-Peak Demand Resource or Seasonal Peak Demand Resource with the monthly settlement report for the Forward Capacity Market, which documents the total demand reduction capability for all On-Peak Demand Resources and Seasonal Peak Demand Resources in operation as of the end of the previous month.

**MEPCO Grandfathered Transmission Service Agreement (MG TSA)** is a MEPCO long-term firm point-to-point transmission service agreement with a POR or POD at the New Brunswick border and a start date prior to June 1, 2007 where the holder has elected, by written notice delivered to MEPCO within five (5) days following the filing of the settlement agreement in Docket Nos. ER07-1289 and EL08-56 or by September 1, 2008 (whichever is later), MG TSA treatment as further described in Section II.45.1.

**Merchant Transmission Facilities (MTF)** are the transmission facilities owned by MTOs, defined and classified as MTF pursuant to Schedule 18 of the OATT, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in a MTOA or Attachment K to the OATT, rated 69 kV or above and required to allow energy from significant power sources to move freely on the New England Transmission System.

**Merchant Transmission Facilities Provider (MTF Provider)** is an entity as defined in Schedule 18 of the OATT.

**Merchant Transmission Facilities Service (MTF Service)** is transmission service over MTF as provided for in Schedule 18 of the OATT.

**Merchant Transmission Operating Agreement (MTOA)** is an agreement between the ISO and an MTO with respect to its MTF.

**Merchant Transmission Owner (MTO)** is an owner of MTF.

**Meter Data Error** means an error in meter data, including an error in Coincident Peak Contribution values, on an Invoice issued by the ISO after the completion of the Data Reconciliation Process as described in the ISO New England Manuals and in Section III.3.8 of Market Rule 1.

**Meter Data Error RBA Submission Limit** means the date thirty 30 calendar days after the issuance of the Invoice containing the results of the Data Reconciliation Process as described in the ISO New England Manuals and in Section III.3.6 of Market Rule 1.

**Metered Quantity For Settlement** is defined in Section III.3.2.1.1 of Market Rule 1.

**Minimum Consumption Limit** is (a) the lowest consumption level, in MW, available for economic dispatch from a DARD and is based on the physical characteristics as submitted as part of the DARD's Offer Data, and (b) for a DARD undergoing Facility and Equipment Testing or auditing, the level to which the DARD requests and is approved to operate or is directed to operate for purposes of completing the Facility and Equipment Testing or auditing.

**Minimum Down Time** is the number of hours that must elapse after a Generator Asset or Storage DARD has been released for shutdown at or below its Economic Minimum Limit or Minimum Consumption Limit before the Generator Asset or Storage DARD can be brought online and be released for dispatch at its Economic Minimum Limit or Minimum Consumption Limit.

**Minimum Generation Emergency** means an Emergency declared by the ISO in which the ISO anticipates requesting one or more Generator Assets to operate at or below Economic Minimum Limit in order to manage, alleviate, or end the Emergency.

**Minimum Generation Emergency Credits** are those Real-Time Dispatch NCPC Credits calculated pursuant to Appendix F of Market Rule 1 for resources within a reliability region that are dispatched during a period for which a Minimum Generation Emergency has been declared.

**Minimum Reduction** is the minimum available demand reduction, in MW, of a Demand Response Resource that a Market Participant offers to deliver in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the Demand Response Resource's Demand Reduction Offer.

**Minimum Reduction Time** is the minimum number of hours of demand reduction at or above the Minimum Reduction for which the ISO must dispatch a Demand Response Resource to reduce demand.

**Minimum Run Time** is the number of hours that a Generator Asset must remain online after it has been scheduled to reach its Economic Minimum Limit before it can be released for shutdown from its Economic Minimum Limit or the number of hours that must elapse after a Storage DARD has been scheduled to consume at its Minimum Consumption Limit before it can be released for shutdown.

**Minimum Time Between Reductions** is the number of hours that must elapse after a Demand Response Resource has received a Dispatch Instruction to stop reducing demand before the Demand Response Resource can achieve its Minimum Reduction after receiving a Dispatch Instruction to start reducing demand.

**Minimum Total Reserve Requirement**, which does not include Replacement Reserve, is the combined amount of TMSR, TMNSR, and TMOR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Monthly Blackstart Service Charge** is the charge made to Transmission Customers pursuant to Section 6 of Schedule 16 to the OATT.

**Monthly Capacity Payment** is the Forward Capacity Market payment described in Section III.13.7.3 of Market Rule 1.

**Monthly Peak** is defined in Section II.21.2 of the OATT.

**Monthly Real-Time Demand Reduction Obligation** is the absolute value of a Customer's hourly Real-Time Demand Reduction Obligation summed for all hours in a month, in MWs.

**Monthly Real-Time Generation Obligation** is the sum, for all hours in a month, at all Locations, of a Customer's Real-Time Generation Obligation, in MWs.

**Monthly Real-Time Load Obligation** is the absolute value of a Customer's hourly Real-Time Load Obligation summed for all hours in a month, in MWs.

**Monthly Regional Network Load** is defined in Section II.21.2 of the OATT.

**Monthly Statement** is the first weekly Statement issued on a Monday after the ninth of a calendar month that includes both the Hourly Charges for the relevant billing period and Non-Hourly Charges for the immediately preceding calendar month.

**MRI Transition Period** is the period specified in Section III.13.2.2.1.

**MUI** is the market user interface.

**Municipal Market Participant** is defined in Section II of the ISO New England Financial Assurance Policy.

**MW** is megawatt.

**MWh** is megawatt-hour.

**Native Load Customers** are the wholesale and retail power customers of a Transmission Owner on whose behalf the Transmission Owner, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate its system to meet the reliable electric needs of such customers.

**NCPC Charge** means the charges to Market Participants calculated pursuant to Appendix F to Market Rule 1.

**NCPC Credit** means the credits to Market Participants calculated pursuant to Appendix F to Market Rule 1.

**Needs Assessment** is defined in Section 4.1 of Attachment K to the OATT.

**NEMA**, for purposes of Section III of the Tariff, is the Northeast Massachusetts Reliability Region.

**NEMA Contract** is a contract described in Appendix C of Market Rule 1 and listed in Exhibit 1 of Appendix C of Market Rule 1.

**NEMA Load Serving Entity (NEMA LSE)** is a Transmission Customer or Congestion Paying LSE Entity that serves load within NEMA.

**NEMA or Northeast Massachusetts Upgrade**, for purposes of Section II of the Tariff, is an addition to or modification of the PTF into or within the Northeast Massachusetts Reliability Region that was not, as of December 31, 1999, the subject of a System Impact Study or application filed pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff; that is not related to generation interconnections; and that will be completed and placed in service by June 30, 2004. Such upgrades include, but are not limited to, new transmission facilities and related equipment and/or modifications to existing transmission facilities and related equipment. The list of NEMA Upgrades is contained in Schedule 12A of the OATT.

**NEPOOL** is the New England Power Pool, and the entities that collectively participated in the New England Power Pool.

**NEPOOL Agreement** is the agreement among the participants in NEPOOL.

**NEPOOL GIS** is the generation information system.

**NEPOOL GIS Administrator** is the entity or entities that develop, administer, operate and maintain the NEPOOL GIS.

**NEPOOL GIS API Fees** are the one-time on-boarding fees and annual maintenance fees charged to NEPOOL by the NEPOOL GIS Administrator for each NEPOOL Participant or Market Participant that accesses the NEPOOL GIS through an application programming interface pursuant to Rule 3.9(b) of the operating rules of the NEPOOL GIS.

**NEPOOL Participant** is a party to the NEPOOL Agreement.

**NERC** is the North American Electric Reliability Corporation or its successor organization.

**NESCOE** is the New England States Committee on Electricity, recognized by the Commission as the regional state committee for the New England Control Area.

**Net Commitment Period Compensation (NCPC)** is the compensation methodology for Resources that is described in Appendix F to Market Rule 1.

**Net CONE** is an estimate of the Cost of New Entry, net of non-capacity market revenues, for a reference technology resource type and is intended to equal the amount of capacity revenue the reference technology resource would require to be economically viable given reasonable expectations of the energy and ancillary services revenues under long-term equilibrium conditions.

**Net Regional Clearing Price** is described in Section III.13.7.5 of Market Rule 1.

**Net Supply** is energy injected into the transmission or distribution system at a Retail Delivery Point.

**Net Supply Capability** is the maximum Net Supply a facility is physically and contractually able to inject into the transmission or distribution system at its Retail Delivery Point.

**Network Capability Interconnection Standard** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Network Customer** is a Transmission Customer receiving RNS or LNS.

**Network Import Capability (NI Capability)** is defined in Section I of Schedule 25 of the OATT.

**Network Import Interconnection Service (NI Interconnection Service)** is defined in Section I of Schedule 25 of the OATT.

**Network Resource** is defined as follows: (1) With respect to Market Participants, (a) any generating resource located in the New England Control Area which has been placed in service prior to the Compliance Effective Date (including a unit that has lost its capacity value when its capacity value is restored and a deactivated unit which may be reactivated without satisfying the requirements of Section II.46 of the OATT in accordance with the provisions thereof) until retired; (b) any generating resource located in the New England Control Area which is placed in service after the Compliance Effective Date until retired, provided that (i) the Generator Owner has complied with the requirements of Sections II.46 and II.47 and Schedules 22 and 23 of the OATT, and (ii) the output of the unit shall be limited in accordance with Sections II.46 and II.47 and Schedules 22 and 23, if required; and (c) any generating



resource or combination of resources (including bilateral purchases) located outside the New England Control Area for so long as any Market Participant has an Ownership Share in the resource or resources which is being delivered to it in the New England Control Area to serve Regional Network Load located in the New England Control Area or other designated Regional Network Loads contemplated by Section II.18.3 of the OATT taking Regional Network Service. (2) With respect to Non-Market Participant Transmission Customers, any generating resource owned, purchased or leased by the Non-Market Participant Transmission Customer which it designates to serve Regional Network Load.

**New Brunswick Security Energy** is defined in Section III.3.2.6A of Market Rule 1.

**New Capacity Offer** is an offer in the Forward Capacity Auction to provide capacity from a New Generating Capacity Resource, New Import Capacity Resource or New Demand Capacity Resource.

**New Capacity Qualification Deadline** is a deadline, specified in Section III.13.1.10 of Market Rule 1, for submission of certain qualification materials for the Forward Capacity Auction, as discussed in Section III.13.1 of Market Rule 1.

**New Capacity Qualification Package** is information submitted by certain new resources prior to participation in the Forward Capacity Auction, as described in Section III.13.1 of Market Rule 1.

**New Capacity Resource** is a resource (i) that never previously received any payment as a capacity resource including any capacity payment pursuant to the market rules in effect prior to June 1, 2010 and that has not cleared in any previous Forward Capacity Auction; or (ii) that is otherwise eligible to participate in the Forward Capacity Auction as a New Capacity Resource.

**New Capacity Show of Interest Form** is described in Section III.13.1.1.2.1 of Market Rule 1.

**New Capacity Show of Interest Submission Window** is the period of time during which a Project Sponsor may submit a New Capacity Show of Interest Form or a New Demand Capacity Resource Show of Interest Form, as described in Section III.13.1.10 of Market Rule 1.

**New Demand Capacity Resource** is a type of Demand Capacity Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.1 of Market Rule 1.

**New Demand Capacity Resource Qualification Package** is the information that a Project Sponsor must submit, in accordance with Section III.13.1.4.1.1.2 of Market Rule 1, for each resource that it seeks to offer in the Forward Capacity Auction as a New Demand Capacity Resource.

**New Demand Capacity Resource Show of Interest Form** is described in Section III.13.1.4.1.1.1 of Market Rule 1.

**New England Control Area** is the Control Area for New England, which includes PTF, Non-PTF, MTF and OTF. The New England Control Area covers Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and part of Maine (i.e., excluding the portions of Northern Maine and the northern portion of Eastern Maine which are in the Maritimes Control Area).

**New England Markets** are markets or programs for the purchase of energy, capacity, ancillary services, demand response services or other related products or services (including Financial Transmission Rights) that are delivered through or useful to the operation of the New England Transmission System and that are administered by the ISO pursuant to rules, rates, or agreements on file from time to time with the Federal Energy Regulatory Commission.

**New England System Restoration Plan** is the plan that is developed by ISO, in accordance with NERC Reliability Standards, NPCC regional criteria and standards, ISO New England Operating Documents and ISO operating agreements, to facilitate the restoration of the New England Transmission System following a partial or complete shutdown of the New England Transmission System.

**New England Transmission System** is the system of transmission facilities, including PTF, Non-PTF, OTF and MTF, within the New England Control Area under the ISO's operational jurisdiction.

**New Generating Capacity Resource** is a type of resource participating in the Forward Capacity Market, as described in Section III.13.1.1.1 of Market Rule 1.

**New Import Capacity Resource** is a type of resource participating in the Forward Capacity Market, as defined in Section III.13.1.3.4 of Market Rule 1.

**New Resource Offer Floor Price** is defined in Section III.A.21.2.

**NMPTC** means Non-Market Participant Transmission Customer.

**NMPTC Credit Threshold** is described in Section V.A.2 of the ISO New England Financial Assurance Policy.

**NMPTC Financial Assurance Requirement** is an amount of additional financial assurance for Non-Market Participant Transmission Customers described in Section V.D of the ISO New England Financial Assurance Policy.

**Node** is a point on the New England Transmission System at which LMPs are calculated.

**No-Load Fee** is the amount, in dollars per hour, for a Generator Asset that must be paid to Market Participants with an Ownership Share in the Generator Asset for being scheduled in the New England Markets, in addition to the Start-Up Fee and price offered to supply energy, for each hour that the Generator Asset is scheduled in the New England Markets.

**Nominated Consumption Limit** is the consumption level specified by the Market Participant for a Dispatchable Asset Related Demand as adjusted in accordance with the provisions of Section III.13.7.5.1.3.

**Non-Commercial Capacity** is the capacity of a New Capacity Resource or an Existing Capacity Resource, or portion thereof, that has not achieved FCM Commercial Operation.

**Non-Commercial Capacity Cure Period** is the time period described in Section VII.D of the ISO New England Financial Assurance Policy.

**Non-Commercial Capacity Financial Assurance Amount (Non-Commercial Capacity FA Amount)** is the financial assurance amount held on Non-Commercial Capacity cleared in a Forward Capacity Auction as calculated in accordance with Section VII.B.2 of the ISO New England Financial Assurance Policy.

**Non-Designated Blackstart Resource Study Cost Payments** are the study costs reimbursed under Section 5.3 of Schedule 16 of the OATT.

**Non-Dispatchable Resource** is any Resource that does not meet the requirements to be a Dispatchable Resource.

**Non-Hourly Charges** are defined in Section 1.3 of the ISO New England Billing Policy.

**Non-Hourly Requirements** are determined in accordance with Section III.A(ii) of the ISO New England Financial Assurance Policy, which is Exhibit 1A of Section I of the Tariff.

**Non-Incumbent Transmission Developer** is a Qualified Transmission Project Sponsor that: (i) is not currently a PTO; (ii) has a transmission project listed in the RSP Project List; and (iii) has executed a Non-Incumbent Transmission Developer Operating Agreement. “Non-Incumbent Transmission Developer” also includes a PTO that proposes the development of a transmission facility not located within or connected to its existing electric system; however, because such a PTO is a party to the TOA, it is not required to enter into a Non-Incumbent Transmission Developer Operating Agreement.

**Non-Incumbent Transmission Developer Operating Agreement (or NTDOA)** is an agreement between the ISO and a Non-Incumbent Transmission Developer in the form specified in Attachment O to the OATT that sets forth their respective rights and responsibilities to each other with regard to proposals for and construction of certain transmission facilities.

**Non-Market Participant** is any entity that is not a Market Participant.

**Non-Market Participant Transmission Customer** is any entity which is not a Market Participant but is a Transmission Customer.

**Non-Municipal Market Participant** is defined in Section II of the ISO New England Financial Assurance Policy.

**Non-PTF Transmission Facilities (Non-PTF)** are the transmission facilities owned by the PTOs that do not constitute PTF, OTF or MTF.

**Non-Qualifying** means a Market Participant that is not a Credit Qualifying Market Participant.

**Notice of RBA** is defined in Section 6.3.2 of the ISO New England Billing Policy.

**Notification Time** is the time required for a Generator Asset to synchronize to the system from the time a startup Dispatch Instruction is received from the ISO.

**Northeastern Planning Protocol** is the Amended and Restated Northeastern ISO/RTO Planning Coordination Protocol on file with the Commission and posted on the ISO website at the following URL: [www.iso-ne.com/static-assets/documents/2015/07/northeastern\\_protocol\\_dmeast.doc](http://www.iso-ne.com/static-assets/documents/2015/07/northeastern_protocol_dmeast.doc).

**NPCC** is the Northeast Power Coordinating Council.

**Obligation Month** means a time period of one calendar month for which capacity payments are issued and the costs associated with capacity payments are allocated.

**Offer Data** means the scheduling, operations planning, dispatch, new Resource, and other data, including Generator Asset, Dispatchable Asset Related Demand, and Demand Response Resource operating limits based on physical characteristics, and information necessary to schedule and dispatch Generator Assets, Dispatchable Asset Related Demands, and Demand Response Resources for the provision or consumption of energy, the provision of other services, and the maintenance of the reliability and security of the transmission system in the New England Control Area, and specified for submission to the New England Markets for such purposes by the ISO.

**Offer Review Trigger Prices** are the prices specified in Section III.A.21.1 of Market Rule 1 associated with the submission of New Capacity Offers in the Forward Capacity Auction.

**Offered CLAIM10** is a Supply Offer value or a Demand Reduction Offer value between 0 and the CLAIM10 of the resource that represents the amount of TMNSR available either from an off-line Fast Start Generator or from a Fast Start Demand Response Resource that has not been dispatched.

**Offered CLAIM30** is a Supply Offer value or a Demand Reduction Offer value between 0 and the CLAIM30 of the resource that represents the amount of TMOR available either from an off-line Fast Start Generator or from a Fast Start Demand Response Resource that has not been dispatched.

**On-Peak Demand Resource** is a type of Demand Capacity Resource and means installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that reduce the total amount of electrical energy consumed during Demand Resource On-Peak Hours, while delivering a comparable or acceptable level of end-use service. Such measures include Energy Efficiency, Load Management, and Distributed Generation.

**Open Access Same-Time Information System (OASIS)** is the ISO information system and standards of conduct responding to requirements of 18 C.F.R. §37 of the Commission's regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.

**Open Access Transmission Tariff (OATT)** is Section II of the ISO New England Inc. Transmission, Markets and Services Tariff.

**Operating Authority** is defined pursuant to a MTOA, an OTOA, the TOA or the OATT, as applicable.

**Operating Data** means GADS Data, data equivalent to GADS Data, CARL Data, metered load data, or actual system failure occurrences data, all as described in the ISO New England Operating Procedures.

**Operating Day** means the calendar day period beginning at midnight for which transactions on the New England Markets are scheduled.

**Operating Reserve** means Ten-Minute Spinning Reserve (TMSR), Ten-Minute Non-Spinning Reserve (TMNSR) and Thirty-Minute Operating Reserve (TMOR).

**Operations Date** is February 1, 2005.

**OTF Service** is transmission service over OTF as provided for in Schedule 20.

**Other Transmission Facility (OTF)** are the transmission facilities owned by Transmission Owners, defined and classified as OTF pursuant to Schedule 20, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in the OTOA, rated 69 kV or above, and required to allow energy from significant power sources to move freely on the New England Transmission System. OTF classification shall be limited to the Phase I/II HVDC-TF.

**Other Transmission Operating Agreements (OTOA)** is the agreement(s) between the ISO, an OTO and/or the associated service provider(s) with respect to an OTF, which includes the HVDC Transmission Operating Agreement and the Phase I/II HVDC-TF Transmission Service Administration Agreement. With respect to the Phase I/II HVDC-TF, the HVDC Transmission Operating Agreement covers the rights and responsibilities for the operation of the facility and the Phase I/II HVDC-TF Transmission Service Administration Agreement covers the rights and responsibilities for the administration of transmission service.

**Other Transmission Owner (OTO)** is an owner of OTF.

**Ownership Share** is a right or obligation, for purposes of settlement, to a percentage share of all credits or charges associated with a Generator Asset or a Load Asset, where such facility is interconnected to the New England Transmission System.

**Participant Expenses** are defined in Section 1 of the Participants Agreement.

**Participant Required Balance** is defined in Section 5.3 of the ISO New England Billing Policy.

**Participant Vote** is defined in Section 1 of the Participants Agreement.

**Participants Agreement** is the agreement among the ISO, the New England Power Pool and Individual Participants, as amended from time to time, on file with the Commission.

**Participants Committee** is the principal committee referred to in the Participants Agreement.

**Participating Transmission Owner (PTO)** is a transmission owner that is a party to the TOA.

**Passive DR Audit** is the audit performed pursuant to Section III.13.6.1.5.4.

**Passive DR Auditing Period** is the summer Passive DR Auditing Period (June 1 to August 31) or winter Passive DR Auditing Period (December 1 to January 31) applicable to On-Peak Demand Resources and Seasonal Peak Demand Resources.

**Payment** is a sum of money due to a Covered Entity from the ISO.

**Payment Default Shortfall Fund** is defined in Section 5.1 of the ISO New England Billing Policy.

**Permanent De-list Bid** is a bid that may be submitted by an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Capacity Resource in the Forward Capacity Auction to permanently remove itself from the capacity market, as described in Section III.13.1.2.3.1.5 of Market Rule 1.

**Phase I Transfer Credit** is 40% of the HQICC, or such other fraction of the HQICC as the ISO may establish.

**Phase I/II HVDC-TF** is defined in Schedule 20A to Section II of this Tariff.

**Phase I/II HVDC-TF Transfer Capability** is the transfer capacity of the Phase I/II HVDC-TF under normal operating conditions, as determined in accordance with Good Utility Practice. The “Phase I Transfer Capability” is the transfer capacity under normal operating conditions, as determined in accordance with Good Utility Practice, of the Phase I terminal facilities as determined initially as of the time immediately prior to Phase II of the Phase I/II HVDC-TF first being placed in service, and as adjusted thereafter only to take into account changes in the transfer capacity which are independent of any effect of Phase II on the operation of Phase I. The “Phase II Transfer Capability” is the difference between the Phase I/II HVDC-TF Transfer Capability and the Phase I Transfer Capability. Determinations of, and any adjustment in, Phase I/II HVDC-TF Transfer Capability shall be made by the ISO, and the basis for any such adjustment shall be explained in writing and posted on the ISO website.

**Phase One Proposal** is a first round submission, as defined in Section 4.3 of Attachment K of the OATT, of a proposal for a Reliability Transmission Upgrade or Market Efficiency Transmission Upgrade, as applicable, by a Qualified Transmission Project Sponsor.

**Phase II Transfer Credit** is 60% of the HQICC, or such other fraction of the HQICC as the ISO may establish.

**Phase Two Solution** is a second round submission, as defined in Section 4.3 of Attachment K of the OATT, of a proposal for a Reliability Transmission Upgrade or Market Efficiency Transmission Upgrade by a Qualified Transmission Project Sponsor.



**Planning Advisory Committee** is the committee described in Attachment K of the OATT.

**Planning and Reliability Criteria** is defined in Section 3.3 of Attachment K to the OATT.

**Planning Authority** is an entity defined as such by the North American Electric Reliability Corporation.

**Point(s) of Delivery (POD)** is point(s) of interconnection where capacity and/or energy transmitted by a Transmission Customer will be made available to the Receiving Party under the OATT.

**Point of Interconnection** shall have the same meaning as that used for purposes of Schedules 22, 23 and 25 of the OATT.

**Point(s) of Receipt (POR)** is point(s) of interconnection where capacity and/or energy transmitted by a Transmission Customer will be made available by the Delivering Party under the OATT.

**Point-To-Point Service** is the transmission of capacity and/or energy on either a firm or non-firm basis from the Point(s) of Receipt to the Point(s) of Delivery under the OATT pursuant to Local Point-To-Point Service or OTF Service or MTF Service; and the transmission of capacity and/or energy from the Point(s) of Receipt to the Point(s) of Delivery under the OATT pursuant to Through or Out Service.

**Policy Scenario** is an [Economic Study reference scenario that is described in Section 17.2\(c\) of Attachment K to the OATT.](#)

**Pool-Planned Unit** is one of the following units: New Haven Harbor Unit 1 (Coke Works), Mystic Unit 7, Canal Unit 2, Potter Unit 2, Wyman Unit 4, Stony Brook Units 1, 1A, 1B, 1C, 2A and 2B, Millstone Unit 3, Seabrook Unit 1 and Waters River Unit 2 (to the extent of 7 megawatts of its Summer capability and 12 megawatts of its Winter capability).

**Pool PTF Rate** is the transmission rate determined in accordance with Schedule 8 to the OATT.

**Pool RNS Rate** is the transmission rate determined in accordance with paragraph (2) of Schedule 9 of Section II of the Tariff.

**Pool-Scheduled Resources** are described in Section III.1.10.2 of Market Rule 1.

**Pool Supported PTF** is defined as: (i) PTF first placed in service prior to January 1, 2000; (ii) Generator Interconnection Related Upgrades with respect to Category A and B projects (as defined in Schedule 11), but only to the extent not paid for by the interconnecting Generator Owner; and (iii) other PTF upgrades, but only to the extent the costs therefore are determined to be Pool Supported PTF in accordance with Schedule 12.

**Pool Transmission Facility (PTF)** means the transmission facilities owned by PTOs which meet the criteria specified in Section II.49 of the OATT.

**Posting Entity** is any Market Participant or Non-Market Participant Transmission Customer providing financial security under the provisions of the ISO New England Financial Assurance Policy.

**Posture** means an action of the ISO to deviate from the jointly optimized security constrained economic dispatch for Energy and Operating Reserves solution for a Resource produced by the ISO's technical software for the purpose of maintaining sufficient Operating Reserve (both online and off-line) or for the provision of voltage or VAR support.

**Posturing Credits** are the Real-Time Posturing NCPC Credits for Generators (Other Than Limited Energy Resources) Postured for Reliability and the Real-Time Posturing NCPC Credit for Limited Energy Resources Postured for Reliability.

**Power Purchaser** is the entity that is purchasing the capacity and/or energy to be transmitted under the OATT.

**Principal** is (i) the sole proprietor of a sole proprietorship; (ii) a general partner of a partnership; (iii) a president, chief executive officer, chief operating officer or chief financial officer (or equivalent position) of an organization; (iv) a manager, managing member or a member vested with the management authority for a limited liability company or limited liability partnership; (v) any person or entity that has the power to exercise a controlling influence over an organization's activities that are subject to regulation by the Federal Energy Regulatory Commission, the Securities and Exchange Commission, the Commodity Futures Trading Commission, any exchange monitored by the National Futures Association, or any state entity responsible for regulating activity in energy markets; or (vi) any person or entity that: (a) is the

direct owner of 10% or more of any class of an organization's equity securities; or (b) has directly contributed 10% or more of an organization's capital.

**Profiled Load Assets** include all Load Assets that are not directly metered by OP-18 compliant metering as currently described in Section IV (Metering and Recording for Settlements) of OP18, and some Load Assets that are measured by OP-18 compliant metering (as currently described in Section IV of OP-18) to which the Host Participant Assigned Meter Reader allocates non-PTF losses.

**Project Sponsor** is an entity seeking to have a New Generating Capacity Resource, New Import Capacity Resource or New Demand Capacity Resource participate in the Forward Capacity Market, as described in Section III.13.

**Proxy De-List Bid** is a type of bid used in the Forward Capacity Market.

**Provisional Member** is defined in Section I.68A of the Restated NEPOOL Agreement.

**PTO Administrative Committee** is the committee referred to in Section 11.04 of the TOA.

**Public Policy Requirement** is a requirement reflected in a statute enacted by, or a regulation promulgated by, the federal government or a state or local (e.g., municipal or county) government.

**Public Policy Transmission Study** is a study conducted by the ISO pursuant to the process set out in Section 4A.3 of Attachment K of the OATT, and consists of two phases: (i) an initial phase to produce a rough estimate of the costs and benefits of concepts that could meet transmission needs driven by public policy requirements; and (ii) a follow-on phase designed to produce more detailed analysis and engineering work on transmission concepts identified in the first phase.

**Public Policy Local Transmission Study** is a study conducted by a PTO pursuant to the process set out in Section 1.6 of Attachment K Appendix 1 of the OATT, and consists of two phases: (i) an initial phase to produce an estimate of the costs and benefits of concepts that could meet transmission needs driven by public policy requirements; and (ii) a follow-on phase designed to produce more detailed analysis and engineering work on transmission concepts identified in the first phase.

**Public Policy Transmission Upgrade** is an addition and/or upgrade to the New England Transmission System that meets the voltage and non-voltage criteria for Public Policy Transmission Upgrade PTF classification specified in the OATT, and has been included in the Regional System Plan and RSP Project List as a Public Policy Transmission Upgrade pursuant to the procedures described in Section 4A of Attachment K of the OATT.

**Publicly Owned Entity** is defined in Section I of the Restated NEPOOL Agreement.

**Qualification Process Cost Reimbursement Deposit** is described in Section III.13.1.9.3 of Market Rule 1.

**Qualified Capacity** is the amount of capacity a resource may provide in the summer or winter in a Capacity Commitment Period, as determined in the Forward Capacity Market qualification processes.

**Qualified Generator Reactive Resource(s)** is any generator source of dynamic reactive power that meets the criteria specified in Schedule 2 of the OATT.

**Qualified Non-Generator Reactive Resource(s)** is any non-generator source of dynamic reactive power that meets the criteria specified in Schedule 2 of the OATT.

**Qualified Reactive Resource(s)** is any Qualified Generator Reactive Resource and/or Qualified Non-Generator Reactive Resource that meets the criteria specified in Schedule 2 of the OATT.

**Qualified Transmission Project Sponsor** is defined in Sections 4B.2 and 4B.3 of Attachment K of the OATT.

**Queue Position** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Rapid Response Pricing Asset** is: (i) a Fast Start Generator; (ii) a Flexible DNE Dispatchable Generator; or (iii) a Binary Storage DARD with Offer Data specifying a Minimum Run Time and a Minimum Down Time not exceeding one hour each. A Rapid Response Pricing Asset shall also include a Fast Start Demand Response Resource for which the Market Participant's Offer Data meets the following criteria:

(i) Minimum Reduction Time does not exceed one hour; and (ii) Demand Response Resource Notification Time plus Demand Response Resource Start-Up Time does not exceed 30 minutes.

**Rapid Response Pricing Opportunity Cost** is the NCPC Credit described in Section III.F.2.3.10.

**Rated** means a Market Participant that receives a credit rating from one or more of the Rating Agencies, or, if such Market Participant is not rated by one of the Rating Agencies, then a Market Participant that has outstanding unsecured debt rated by one or more of the Rating Agencies.

**Rating Agencies** are Standard and Poor's (S&P), Moody's, and Fitch.

**Rationing Minimum Limit** is the MW quantity for a New Generating Capacity Resource or Existing Generating Capacity Resource below which an offer or bid may not be rationed in the Forward Capacity Auction, but shall not apply to supply offers or demand bids in a substitution auction as specified in Section III.13.2.8.2 and Section III.13.2.8.3.

**RBA Decision** is a written decision provided by the ISO to a Disputing Party and to the Chair of the NEPOOL Budget and Finance Subcommittee accepting or denying a Requested Billing Adjustment within twenty Business Days of the date the ISO distributes a Notice of RBA, unless some later date is agreed upon by the Disputing Party and the ISO.

**Reactive Capability Audit** is an audit that measures the ability of a Reactive Resource to provide or absorb reactive power to or from the transmission system at a specified real power output or consumption.

**Reactive Resource** is a device that dynamically adjusts reactive power output automatically in Real-Time over a continuous range, taking into account control system response bandwidth, within a specified voltage bandwidth in response to grid voltage changes. These resources operate to maintain a set-point voltage and include, but are not limited to, Generator Assets, Dispatchable Asset Related Demands that are part of an Electric Storage Facility, and dynamic transmission devices.

**Reactive Supply and Voltage Control Service** is the form of Ancillary Service described in Schedule 2 of the OATT.

**Real-Time** is a period in the current Operating Day for which the ISO dispatches Resources for energy and Regulation, designates Resources for Regulation and Operating Reserve and, if necessary, commits additional Resources.

**Real-Time Adjusted Load Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Adjusted Load Obligation Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time Commitment NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Congestion Revenue** is defined in Section III.3.2.1(i) of Market Rule 1.

**Real-Time Demand Reduction Obligation** is defined in Section III.3.2.1(c) of Market Rule 1.

**Real-Time Demand Reduction Obligation Deviation** is defined in Section III.3.2.1(e) of Market Rule 1.

**Real-Time Dispatch NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Energy Inventory** is a component of the spot payment that a Market Participant may receive through the inventoried energy program, as described in Section III.K.3.2.1 of Market Rule 1.

**Real-Time Energy Market** means the purchase or sale of energy, purchase of demand reductions, payment of Congestion Costs, and payment for losses for quantity deviations from the Day-Ahead Energy Market in the Operating Day and designation of and payment for provision of Operating Reserve in Real-Time.

**Real-Time Energy Market Deviation Congestion Charge/Credit** is defined in Section III.3.2.1(g) of Market Rule 1.

**Real-Time Energy Market Deviation Energy Charge/Credit** is defined in Section III.3.2.1(g) of Market Rule 1.

**Real-Time Energy Market Deviation Loss Charge/Credit** is defined in Section III.3.2.1(g) of Market Rule 1.

**Real-Time Energy Market NCPC Credits** are the Real-Time Commitment NCPC Credit and the Real-Time Dispatch NCPC Credit.

**Real-Time External Transaction NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Generation Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Generation Obligation Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time High Operating Limit** is the maximum output, in MW, of a Generator Asset that could be achieved, consistent with Good Utility Practice, in response to an ISO request for Energy (including pursuant to Section III.13.6.4 of Market Rule 1), for each hour of the Operating Day, as reflected in the Generator Asset's Offer Data. This value is based on real-time operating conditions and the physical operating characteristics and operating permits of the facility and must be submitted for all Generator Assets (other than Settlement Only Resources).

**Real-Time Load Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Load Obligation Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time Locational Adjusted Net Interchange** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Locational Adjusted Net Interchange Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time Loss Revenue** is defined in Section III.3.2.1(l) of Market Rule 1.

**Real-Time Loss Revenue Charges or Credits** are defined in Section III.3.2.1(m) of Market Rule 1.

**Real-Time NCP Load Obligation** is the maximum hourly value, during a month, of a Market Participant's Real-Time Load Obligation summed over all Locations, excluding exports, in kilowatts.

**Real-Time Offer Change** is a modification to a Supply Offer pursuant to Section III.1.10.9(b).

**Real-Time Posturing NCPC Credit for Generators (Other Than Limited Energy Resources) Postured for Reliability** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Posturing NCPC Credit for Limited Energy Resources Postured for Reliability** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Prices** means the Locational Marginal Prices resulting from the ISO's dispatch of the New England Markets in the Operating Day.

**Real-Time Reserve Charge** is a Market Participant's share of applicable system and Reserve Zone Real-Time Operating Reserve costs attributable to meeting the Real-Time Operating Reserve requirement as calculated in accordance with Section III.10 of Market Rule 1.

**Real-Time Reserve Clearing Price** is the Real-Time TMSR, TMNSR or TMOR clearing price, as applicable, for the system and each Reserve Zone that is calculated in accordance with Section III.2.7A of Market Rule 1.

**Real-Time Reserve Credit** is a Market Participant's compensation associated with that Market Participant's Resources' Reserve Quantity For Settlement as calculated in accordance with Section III.10 of Market Rule 1.

**Real-Time Reserve Designation** is the amount, in MW, of Operating Reserve designated to a Resource in Real-Time by the ISO as described in Section III.1.7.19 of Market Rule 1.

**Real-Time Reserve Opportunity Cost** is defined in Section III.2.7A(b) of Market Rule 1.

**Real-Time Synchronous Condensing NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.



**Real-Time System Adjusted Net Interchange** means, for each hour, the sum of Real-Time Locational Adjusted Net Interchange for a Market Participant over all Locations, in kilowatts.

**Receiving Party** is the entity receiving the capacity and/or energy transmitted to Point(s) of Delivery under the OATT.

**Reference Level** is defined in Section III.A.5.7 of Appendix A of Market Rule 1.

**Regional Benefit Upgrade(s) (RBU)** means a Transmission Upgrade that: (i) is rated 115kV or above; (ii) meets all of the non-voltage criteria for PTF classification specified in the OATT; and (iii) is included in the Regional System Plan as either a Reliability Transmission Upgrade or a Market Efficiency Transmission Upgrade identified as needed pursuant to Attachment K of the OATT. The category of RBU shall not include any Transmission Upgrade that has been categorized under any of the other categories specified in Schedule 12 of the OATT (e.g., an Elective Transmission Upgrade shall not also be categorized as an RBU). Any upgrades to transmission facilities rated below 115kV that were PTF prior to January 1, 2004 shall remain classified as PTF and be categorized as an RBU if, and for so long as, such upgrades meet the criteria for PTF specified in the OATT.

**Regional Network Load** is the load that a Network Customer designates for Regional Network Service under Part II.B of the OATT. The Network Customer's Regional Network Load shall include all load designated by the Network Customer (including losses). A Network Customer may elect to designate less than its total load as Regional Network Load but may not designate only part of the load at a discrete Point of Delivery. Where a Transmission Customer has elected not to designate a particular load at discrete Points of Delivery as Regional Network Load, the Transmission Customer is responsible for making separate arrangements under Part II.C of the OATT for any Point-To-Point Service that may be necessary for such non-designated load. A Network Customer's Monthly Regional Network Load shall be calculated in accordance with Section II.21.2 of the OATT.

**Regional Network Service (RNS)** is the transmission service over the PTF described in Part II.B of the OATT, including such service which is used with respect to Network Resources or Regional Network Load that is not physically interconnected with the PTF.

**Regional Planning Dispute Resolution Process** is described in Section 12 of Attachment K to the OATT.

**Regional System Plan (RSP)** is the plan developed under the process specified in Attachment K of the OATT.

**Regional Transmission Service (RTS)** is Regional Network Service and Through or Out Service as provided over the PTF in accordance with Section II.B, Section II.C, Schedule 8 and Schedule 9 of the OATT.

**Regulation** is the capability of a specific Resource with appropriate telecommunications, control and response capability to respond to an AGC SetPoint.

**Regulation and Frequency Response Service** is the form of Ancillary Service described in Schedule 3 of the OATT. The capability of performing Regulation and Frequency Response Service is referred to as automatic generation control (AGC).

**Regulation Capacity** is the lesser of five times the Automatic Response Rate and one-half of the difference between the Regulation High Limit and the Regulation Low Limit of a Resource capable of providing Regulation.

**Regulation Capacity Requirement** is the amount of Regulation Capacity required to maintain system control and reliability in the New England Control Area as calculated and posted on the ISO website.

**Regulation Capacity Offer** is an offer by a Market Participant to provide Regulation Capacity.

**Regulation High Limit** is an offer parameter that establishes the upper bound for AGC SetPoints and is used in the determination of a Resource's Regulation Capacity.

**Regulation Low Limit** is an offer parameter that establishes the lower bound for AGC SetPoints and is used in the determination of a Resource's Regulation Capacity.

**Regulation Market** is the market described in Section III.14 of Market Rule 1.

**Regulation Resources** are those Alternative Technology Regulation Resources, Generator Assets, and Dispatchable Asset Related Demands that satisfy the requirements of Section III.14.2. Regulation Resources are eligible to participate in the Regulation Market.

**Regulation Service** is the change in output or consumption made in response to changing AGC SetPoints.

**Regulation Service Requirement** is the estimated amount of Regulation Service required to maintain system control and reliability in the New England Control Area as calculated and posted on the ISO website.

**Regulation Service Offer** is an offer by a Market Participant to provide Regulation Service.

**Related Person** is defined pursuant to Section 1.1 of the Participants Agreement.

**Related Transaction** is defined in Section III.1.4.3 of Market Rule 1.

**Reliability Administration Service (RAS)** is the service provided by the ISO, as described in Schedule 3 of Section IV.A of the Tariff, in order to administer the Reliability Markets and provide other reliability-related and informational functions.

**Reliability Committee** is the committee whose responsibilities are specified in Section 8.2.3 of the Participants Agreement.

**Reliability Markets** are, collectively, the ISO's administration of Regulation, the Forward Capacity Market, and Operating Reserve.

**Reliability Region** means any one of the regions identified on the ISO's website. Reliability Regions are intended to reflect the operating characteristics of, and the major transmission constraints on, the New England Transmission System.

**Reliability Transmission Upgrade** means those additions and upgrades not required by the interconnection of a generator that are nonetheless necessary to ensure the continued reliability of the New England Transmission System, taking into account load growth and known resource changes, and

include those upgrades necessary to provide acceptable stability response, short circuit capability and system voltage levels, and those facilities required to provide adequate thermal capability and local voltage levels that cannot otherwise be achieved with reasonable assumptions for certain amounts of generation being unavailable (due to maintenance or forced outages) for purposes of long-term planning studies. Good Utility Practice, applicable reliability principles, guidelines, criteria, rules, procedures and standards of ERO and NPCC and any of their successors, applicable publicly available local reliability criteria, and the ISO System Rules, as they may be amended from time to time, will be used to define the system facilities required to maintain reliability in evaluating proposed Reliability Transmission Upgrades. A Reliability Transmission Upgrade may provide market efficiency benefits as well as reliability benefits to the New England Transmission System.

**Remittance Advice** is an issuance from the ISO for the net Payment owed to a Covered Entity where a Covered Entity's total Payments exceed its total Charges in a billing period.

**Remittance Advice Date** is the day on which the ISO issues a Remittance Advice.

**Renewable Technology Resource** is a Generating Capacity Resource or an On-Peak Demand Resource that satisfies the requirements specified in Section III.13.1.1.1.7.

**Re-Offer Period** is the period that normally occurs between the posting of the of the Day-Ahead Energy Market results and 2:00 p.m. on the day before the Operating Day during which a Market Participant may submit revised Supply Offers, revised External Transactions, or revised Demand Bids associated with Dispatchable Asset Related Demands or, revised Demand Reduction Offers associated with Demand Response Resources.

**Replacement Reserve** is described in Part III, Section VII of ISO New England Operating Procedure No. 8.

**Request for Alternative Proposals (RFAP)** is the request described in Attachment K of the OATT.

**Requested Billing Adjustment (RBA)** is defined in Section 6.1 of the ISO New England Billing Policy.

**Required Balance** is an amount as defined in Section 5.3 of the Billing Policy.

**Reseller** is a MGTSA holder that sells, assigns or transfers its rights under its MGTSA, as described in Section II.45.1(a) of the OATT.

**Reserve Adequacy Analysis** is the analysis performed by the ISO to determine if adequate Resources are committed to meet forecasted load, Operating Reserve, and security constraint requirements for the current and next Operating Day.

**Reserve Constraint Penalty Factors (RCPFs)** are rates, in \$/MWh, that are used within the Real-Time dispatch and pricing algorithm to reflect the value of Operating Reserve shortages and are defined in Section III.2.7A(c) of Market Rule 1.

**Reserve Quantity For Settlement** is defined in Section III.10.1 of Market Rule 1.

**Reserve Zone** is defined in Section III.2.7 of Market Rule 1.

**Reserved Capacity** is the maximum amount of capacity and energy that is committed to the Transmission Customer for transmission over the New England Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Part II.C or Schedule 18, 20 or 21 of the OATT, as applicable. Reserved Capacity shall be expressed in terms of whole kilowatts on a sixty-minute interval (commencing on the clock hour) basis, or, in the case of Reserved Capacity for Local Point-to-Point Service, in terms of whole megawatts on a sixty-minute interval basis.

**Resource** means a Generator Asset, a Dispatchable Asset Related Demand, an External Resource, an External Transaction, or a Demand Response Resource.

**Restated New England Power Pool Agreement (RNA)** is the Second Restated New England Power Pool Agreement, which restated for a second time by an amendment dated as of August 16, 2004 the New England Power Pool Agreement dated September 1, 1971, as the same may be amended and restated from time to time, governing the relationship among the NEPOOL members.

**Rest-of-Pool Capacity Zone** is a single Capacity Zone made up of the adjacent Load Zones that are neither export-constrained nor import-constrained.

**Rest of System** is an area established under Section III.2.7(d) of Market Rule 1.

**Retail Delivery Point** is the point on the transmission or distribution system at which the load of an end-use facility, which is metered and assigned a unique account number by the Host Participant, is measured to determine the amount of energy delivered to the facility from the transmission and distribution system. If an end-use facility is connected to the transmission or distribution system at more than one location, the Retail Delivery Point shall consist of the metered load at each connection point, summed to measure the net energy delivered to the facility in each interval.

**Retirement De-List Bid** is a bid to retire an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Capacity Resource from all New England Markets, as described in Section III.13.1.2.3.1.5.

**Returning Market Participant** is a Market Participant, other than an FTR-Only Customer or a Governance Only Member, whose previous membership as a Market Participant was involuntarily terminated due to a Financial Assurance Default or a payment default and, since returning, has been a Market Participant for less than six consecutive months.

**Revenue Requirement** is defined in Section IV.A.2.1 of the Tariff.

**Reviewable Action** is defined in Section III.D.1.1 of Appendix D of Market Rule 1.

**Reviewable Determination** is defined in Section 12.4(a) of Attachment K to the OATT.

**RSP Project List** is defined in Section 1 of Attachment K to the OATT.

**RTEP02 Upgrade(s)** means a Transmission Upgrade that was included in the annual NEPOOL Transmission Plan (also known as the “Regional Transmission Expansion Plan” or “RTEP”) for the year 2002, as approved by ISO New England Inc.’s Board of Directors, or the functional equivalent of such Transmission Upgrade, as determined by ISO New England Inc. The RTEP02 Upgrades are listed in Schedule 12B of the OATT.

**RTO** is a regional transmission organization or comparable independent transmission organization that complies with Order No. 2000 and the Commission’s corresponding regulation.

**Same Reserve Zone Export Transaction** is defined in Section III.1.10.7(f)(iii) of Market Rule 1.

**Schedule, Schedules, Schedule 1, 2, 3, 4 and 5** are references to the individual or collective schedules to Section IV.A. of the Tariff.

**Schedule 20A Service Provider (SSP)** is defined in Schedule 20A to Section II of this Tariff.

**Scheduling Service**, for purposes of Section IV.A and Section IV.B of the Tariff, is the service described in Schedule 1 to Section IV.A of the Tariff.

**Scheduling, System Control and Dispatch Service**, for purposes of Section II of the Tariff, is the form of Ancillary Service described in Schedule 1 of the OATT.

**Seasonal Claimed Capability** is the summer or winter claimed capability of a Generator Asset or Generating Capacity Resource, and represents the maximum dependable load carrying ability of the asset or resource, excluding capacity required for station use.

**Seasonal Claimed Capability Audit** is the Generator Asset audit performed pursuant to Section III.1.5.1.3.

**Seasonal DR Audit** is the Demand Response Resource audit performed pursuant to Section III.1.5.1.3.1.

**Seasonal Peak Demand Resource** is a type of Demand Capacity Resource and shall mean installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that reduce the total amount of electrical energy consumed during Demand Resource Seasonal Peak Hours, while delivering a comparable or acceptable level of end-use service. Such measures include Energy Efficiency, Load Management, and Distributed Generation.

**Section III.1.4 Transactions** are defined in Section III.1.4.2 of Market Rule 1.

**Section III.1.4 Conforming Transactions** are defined in Section III.1.4.2 of Market Rule 1.

**Security Agreement** is Attachment 1 to the ISO New England Financial Assurance Policy.

**Selected Qualified Transmission Project Sponsor** is the Qualified Transmission Project Sponsor that proposed the Phase Two or Stage Two Solution that has been identified by the ISO as the preferred Phase Two or Stage Two Solution.

**Selected Qualified Transmission Project Sponsor Agreement** is the agreement between the ISO and a Selected Qualified Transmission Project Sponsor. The Selected Qualified Transmission Project Sponsor Agreement is provided in Attachment P to the OATT.

**Self-Schedule** is the action of a Market Participant in committing its Generator Asset or DARD, in accordance with applicable ISO New England Manuals, to provide service in an hour, whether or not in the absence of that action the Generator Asset or DARD would have been committed by the ISO to provide the service. For a Generator Asset, Self-Schedule is the action of a Market Participant in committing a Generator Asset to provide Energy in an hour at its Economic Minimum Limit, whether or not in the absence of that action the Generator Asset would have been committed by the ISO to provide the Energy. For a DARD, Self-Schedule is the action of a Market Participant in committing a DARD to consume Energy in an hour at its Minimum Consumption Limit, whether or not in the absence of that action the DARD would have been committed by the ISO to consume Energy. For an External Transaction, a Self-Schedule is a request by a Market Participant for the ISO to select the External Transaction regardless of the LMP. Demand Response Resources are not permitted to Self-Schedule.

**Self-Supplied FCA Resource** is described in Section III.13.1.6 of Market Rule 1.

**Senior Officer** means an officer of the subject entity with the title of vice president (or similar office) or higher, or another officer designated in writing to the ISO by that officer.

**Service Agreement** is a Transmission Service Agreement or an MPSA.

**Service Commencement Date** is the date service is to begin pursuant to the terms of an executed Service Agreement, or the date service begins in accordance with the sections of the OATT addressing the filing of unexecuted Service Agreements.

**Services** means, collectively, the Scheduling Service, EAS and RAS; individually, a Service.



**Settlement Financial Assurance** is an amount of financial assurance required from a Designated FTR Participant awarded a bid in an FTR Auction. This amount is calculated pursuant to Section VI.C of the ISO New England Financial Assurance Policy.

**Settlement Only Resources** are generators of less than 5 MW of maximum net output when operating at any temperature at or above zero degrees Fahrenheit, that meet the metering, interconnection and other requirements in ISO New England Operating Procedure No. 14 and that have elected Settlement Only Resource treatment as described in the ISO New England Manual for Registration and Performance Auditing.

**Shortfall Funding Arrangement**, as specified in Section 5.1 of the ISO New England Billing Policy, is a separate financing arrangement that can be used to make up any non-congestion related differences between amounts received on Invoices and amounts due for ISO Charges in any bill issued.

**Short-Term** is a period of less than one year.

**Significantly Reduced Congestion Costs** are defined in Section III.G.2.2 of Appendix G to Market Rule 1.

**SMD Effective Date** is March 1, 2003.

**Solar High Limit** is the estimated power output (MW) of a solar Generator Asset given the Real-Time solar and weather conditions, taking into account equipment outages, and absent any self-imposed reductions in power output or any reduction in power output as a result of a Dispatch Instruction, calculated in the manner described in the ISO Operating Documents.

**Solar Plant Future Availability** is the forecasted Real-Time High Operating Limit of a solar Generator Asset, calculated in the manner described in the ISO Operating Documents.

**Solutions Study** is described in Section 4.2(b) of Attachment K to the OATT.

**Special Constraint Resource (SCR)** is a Resource that provides Special Constraint Resource Service under Schedule 19 of the OATT.

**Special Constraint Resource Service** is the form of Ancillary Service described in Schedule 19 of the OATT.

**Specified-Term Blackstart Capital Payment** is the annual compensation level, as calculated pursuant to Section 5.1 of Schedule 16 of the OATT, for a Designated Blackstart Resource's capital Blackstart Equipment costs associated with the provision of Blackstart Service (except for capital costs associated with adhering to NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Sponsored Policy Resource** is a New Capacity Resource that: receives a revenue source, other than revenues from ISO-administered markets, that is supported by a government-regulated rate, charge, or other regulated cost recovery mechanism, and; qualifies as a renewable, clean, zero carbon, or alternative energy resource under a renewable energy portfolio standard, clean energy standard, decarbonization or net-zero carbon standard, alternative energy portfolio standard, renewable energy goal, clean energy goal, or decarbonization or net-zero carbon goal enacted by federal or New England state statute, regulation, or executive or administrative order and as a result of which the resource receives the revenue source.

**Stage One Proposal** is a first round submission, as defined in Sections 4A.5 of Attachment K of the OATT, of a proposal for a Public Policy Transmission Upgrade by a Qualified Transmission Project Sponsor.

**Stage Two Solution** is a second round submission, as defined in Section 4A.5 of Attachment K of the OATT, of a proposal for a Public Policy Transmission Upgrade by a Qualified Transmission Project Sponsor.

**[Stakeholder-Requested Scenario](#)** is an [Economic Study reference scenario that is described in Section 17.2\(d\) of Attachment K to the OATT.](#)

**Standard Blackstart Capital Payment** is the annual compensation level, as calculated pursuant to Section 5.1 of Schedule 16 of the OATT, for a Designated Blackstart Resource's capital Blackstart Equipment costs associated with the provision of Blackstart Service (except for capital costs associated with adhering to NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Start-of-Round Price** is the highest price associated with a round of a Forward Capacity Auction as described in Section III.13.2.3.1 of Market Rule 1.

**Start-Up Fee** is the amount, in dollars, that must be paid for a Generator Asset to Market Participants with an Ownership Share in the Generator Asset each time the Generator Asset is scheduled in the New England Markets to start-up.

**Start-Up Time** is the time it takes the Generator Asset, after synchronizing to the system, to reach its Economic Minimum Limit and, for dispatchable Generator Assets, be ready for further dispatch by the ISO.

**State Estimator** means the computer model of power flows specified in Section III.2.3 of Market Rule 1.

**State-identified Requirement** refers to a legal requirement, mandate or policy of a New England state or local government that forms the basis for a Longer-Term Transmission Study request submitted to the ISO pursuant to the process set out in Section 16 of Attachment K of the OATT.

**Statements**, for the purpose of the ISO New England Billing Policy, refer to both Invoices and Remittance Advices.

**Static De-List Bid** is a bid that may be submitted by an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Capacity Resource in the Forward Capacity Auction to remove itself from the capacity market for a one year period, as described in Section III.13.1.2.3.1.1 of Market Rule 1.

**Station** is one or more Existing Generating Capacity Resources consisting of one or more assets located within a common property boundary.

**Station Going Forward Common Costs** are the net costs associated with a Station that are avoided only by the clearing of the Static De-List Bids, the Permanent De-List Bids or the Retirement De-List Bids of all the Existing Generating Capacity Resources comprising the Station.

**Station-level Blackstart O&M Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Station-level Specified-Term Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Station-level Standard Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Storage DARD** is a DARD that participates in the New England Markets as part of an Electric Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Summer ARA Qualified Capacity** is described in Section III.13.4.2.1.2.1.1.1 of Market Rule 1.

**Summer Capability Period** means one of two time periods defined by the ISO for the purposes of rating and auditing resources pursuant to Section III.9. The time period associated with the Summer Capability Period is the period of June 1 through September 30.

**Summer Intermittent Reliability Hours** are defined in Section III.13.1.2.2.2.1(c) of Market Rule 1.

**Supply Offer** is a proposal to furnish energy at a Node or Regulation from a Resource that meets the applicable requirements set forth in the ISO New England Manuals submitted to the ISO by a Market Participant with authority to submit a Supply Offer for the Resource. The Supply Offer will be submitted pursuant to Market Rule 1 and applicable ISO New England Manuals, and include a price and information with respect to the quantity proposed to be furnished, technical parameters for the Resource, timing and other matters. A Supply Offer is a subset of the information required in a Market Participant's Offer Data.

**Supply Offer Block-Hours** are Block-Hours assigned to the Lead Market Participant for each Supply Offer. Blocks of the Supply Offer in effect for each hour will be totaled to determine the quantity of Supply Offer Block-Hours for a given day. In the case that a Resource has a Real-Time unit status of "unavailable" for the entire day, that day will not contribute to the quantity of Supply Offer Block-Hours. However, if the Resource has at least one hour of the day with a unit status of "available," the entire day will contribute to the quantity of Supply Offer Block-Hours.

**Synchronous Condenser** is a generator that is synchronized to the grid but supplying no energy for the purpose of providing Operating Reserve or VAR or voltage support.

**System Condition** is a specified condition on the New England Transmission System or on a neighboring system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm MTF or OTF Service on the MTF or the OTF using the curtailment priority pursuant to Section II.44 of the Tariff or Curtailment of Local Long-Term Firm Point-to-Point Transmission Service on the non-PTF using the curtailment priority pursuant to Schedule 21 of the Tariff. Such conditions must be identified in the Transmission Customer's Service Agreement.

**System Impact Study** is an assessment pursuant to Part II.B, II.C, II.G, Schedule 21, Schedule 22, Schedule 23, or Schedule 25 of the OATT of (i) the adequacy of the PTF or Non-PTF to accommodate a request for the interconnection of a new or materially changed generating unit or a new or materially changed interconnection to another Control Area or new Regional Network Service or new Local Service or an Elective Transmission Upgrade, and (ii) whether any additional costs may be required to be incurred in order to provide the interconnection or transmission service.

**System Operator** shall mean ISO New England Inc. or a successor organization.

**System Operating Limit (SOL)** has the meaning specified in the Glossary of Terms Used in NERC Reliability Standards.

**System-Wide Capacity Demand Curve** is the demand curve used in the Forward Capacity Market as specified in Section III.13.2.2.

**TADO** is the total amount due and owing (not including any amounts due under Section 14.1 of the RNA) at such time to the ISO, NEPOOL, the PTOs, the Market Participants and the Non-Market Participant Transmission Customers, by all PTOs, Market Participants and Non-Market Participant Transmission Customers.

**Tangible Net Worth** is the value, determined in accordance with international accounting standards or generally accepted accounting principles in the United States, of all of that entity's assets less the following: (i) assets the ISO reasonably believes to be restricted or potentially unavailable to settle a

claim in the event of a default (e.g., regulatory assets, restricted assets, and Affiliate assets), net of any matching liabilities, to the extent that the result of that netting is a positive value; (ii) derivative assets, net of any matching liabilities, to the extent that the result of that netting is a positive value; (iii) the amount at which the liabilities of the entity would be shown on a balance sheet in accordance with international accounting standards or generally accepted accounting principles in the United States; (iv) preferred stock; (v) non-controlling interest; and (vi) all of that entity's intangible assets (e.g., patents, trademarks, franchises, intellectual property, goodwill and any other assets not having a physical existence), in each case as shown on the most recent financial statements provided by such entity to the ISO.

**Technical Committee** is defined in Section 8.2 of the Participants Agreement.

**Ten-Minute Non-Spinning Reserve (TMNSR)** is a form of ten-minute reserve capability, determined pursuant to Section III.1.7.19.2.

**Ten-Minute Non-Spinning Reserve Service** is the form of Ancillary Service described in Schedule 6 of the OATT.

**Ten-Minute Reserve Requirement** is the combined amount of TMSR and TMNSR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Ten-Minute Spinning Reserve (TMSR)** is a form of ten-minute reserve capability, determined pursuant to Section III.1.7.19.2.

**Ten-Minute Spinning Reserve Requirement** is the amount of TMSR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Ten-Minute Spinning Reserve Service** is the form of Ancillary Service described in Schedule 5 of the OATT.

**Third-Party Sale** is any sale for resale in interstate commerce to a Power Purchaser that is not designated as part of Regional Network Load or Local Network Load under the Regional Network Service or Local Network Service, as applicable.

**Thirty-Minute Operating Reserve (TMOR)** is a form of thirty-minute reserve capability, determined pursuant to Section III.1.7.19.2.

**Thirty-Minute Operating Reserve Service** is the form of Ancillary Service described in Schedule 7 of the OATT.

**Through or Out Rate (TOUT Rate)** is the rate per hour for Through or Out Service, as defined in Section II.25.2 of the OATT.

**Through or Out Service (TOUT Service)** means Point-To-Point Service over the PTF provided by the ISO with respect to a transaction that goes through the New England Control Area, as, for example, a single transaction where energy or capacity is transmitted into the New England Control Area from New Brunswick and subsequently out of the New England Control Area to New York, or a single transaction where energy or capacity is transmitted into the New England Control Area from New York through one point on the PTF and subsequently flows over the PTF prior to passing out of the New England Control Area to New York, or with respect to a transaction which originates at a point on the PTF and flows over the PTF prior to passing out of the New England Control Area, as, for example, from Boston to New York.

**Tie-Line Asset** is a physical transmission tie-line, or an inter-state or intra-state border arrangement created according to the ISO New England Manuals and registered in accordance with the Asset Registration Process.

**Total Available Amount** is the sum of the available amount of the Shortfall Funding Arrangement and the balance in the Payment Default Shortfall Fund.

**Total Blackstart Capital Payment** is the annual compensation calculated under either Section 5.1 or Section 5.2 of Schedule 16 of the OATT, as applicable.

**Total Blackstart Service Payments** is monthly compensation to Blackstart Owners or Market Participants, as applicable, and as calculated pursuant to Section 5.6 of Schedule 16 to the OATT.

**Total Reserve Requirement**, which includes Replacement Reserve, is the combined amount of TMSR, TMNSR, and TMOR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Total System Capacity** is the aggregate capacity supply curve for the New England Control Area as determined in accordance with Section III.13.2.3.3 of Market Rule 1.

**Transaction Unit (TU)** is a type of billing determinant under Schedule 2 of Section IV.A of the Tariff used to assess charges to Customers.

**Transition Period:** The six-year period commencing on March 1, 1997.

**Transmission Charges**, for the purposes of the ISO New England Financial Assurance Policy and the ISO New England Billing Policy, are all charges and payments under Schedules 1, 8 and 9 of the OATT.

**Transmission Congestion Credit** means the allocated share of total Transmission Congestion Revenue credited to each holder of Financial Transmission Rights, calculated and allocated as specified in Section III.5.2 of Market Rule 1.

**Transmission Congestion Revenue** is defined in Section III.5.2.5(a) of Market Rule 1.

**Transmission Constraint Penalty Factors** are described in Section III.1.7.5 of Market Rule 1.

**Transmission Credit Limit** is a credit limit, not to be used to meet FTR Requirements, established for each Market Participant in accordance with Section II.D and each Non-Market Participant Transmission Customer in accordance with Section V.B.2 of the ISO New England Financial Assurance Policy.

**Transmission Credit Test Percentage** is calculated in accordance with Section III.B.1(c) of the ISO New England Financial Assurance Policy.

**Transmission Customer** is any Eligible Customer that (i) executes, on its own behalf or through its Designated Agent, an MPSA or TSA, or (ii) requests in writing, on its own behalf or through its Designated Agent, that the ISO, the Transmission Owner, or the Schedule 20A Service Provider, as applicable, file with the Commission, a proposed unexecuted MPSA or TSA containing terms and



conditions deemed appropriate by the ISO (in consultation with the applicable PTO, OTO or Schedule 20A Service Provider) in order that the Eligible Customer may receive transmission service under Section II of this Tariff. A Transmission Customer under Section II of this Tariff includes a Market Participant or a Non-Market Participant taking Regional Network Service, Through or Out Service, MTF Service, OTF Service, Ancillary Services, or Local Service.

**Transmission Default Amount** is all or any part of any amount of Transmission Charges due to be paid by any Covered Entity that the ISO, in its reasonable opinion, believes will not or has not been paid when due.

**Transmission Default Period** is defined in Section 3.4.f of the ISO New England Billing Policy.

**Transmission Late Payment Account** is defined in Section 4.2 of the ISO New England Billing Policy.

**Transmission Late Payment Account Limit** is defined in Section 4.2 of the ISO New England Billing Policy.

**Transmission Late Payment Charge** is defined in Section 4.1 of the ISO New England Billing Policy.

**Transmission, Markets and Services Tariff (Tariff)** is the ISO New England Inc. Transmission, Markets and Services Tariff, as amended from time to time.

**Transmission Obligations** are determined in accordance with Section III.A(vi) of the ISO New England Financial Assurance Policy.

**Transmission Operating Agreement (TOA)** is the Transmission Operating Agreement between and among the ISO and the PTOs, as amended and restated from time to time.

**Transmission Owner** means a PTO, MTO or OTO.

**Transmission Provider** is the ISO for Regional Network Service and Through or Out Service as provided under Section II.B and II.C of the OATT; Cross-Sound Cable, LLC for Merchant Transmission Service as provided under Schedule 18 of the OATT; the Schedule 20A Service Providers for Phase I/II

HVDC-TF Service as provided under Schedule 20A of the OATT; and the Participating Transmission Owners for Local Service as provided under Schedule 21 of the OATT.

**Transmission Requirements** are determined in accordance with Section III.A(iii) of the ISO New England Financial Assurance Policy.

**Transmission Security Analysis Requirement** shall be determined pursuant to Section III.12.2.1.2.

**Transmission Service Agreement (TSA)** is the initial agreement and any amendments or supplements thereto: (A) in the form specified in either Attachment A or B to the OATT, entered into by the Transmission Customer and the ISO for Regional Network Service or Through or Out Service; (B) entered into by the Transmission Customer with the ISO and PTO in the form specified in Attachment A to Schedule 21 of the OATT; (C) entered into by the Transmission Customer with an OTO or Schedule 20A Service Provider in the appropriate form specified under Schedule 20 of the OATT; or (D) entered into by the Transmission Customer with a MTO in the appropriate form specified under Schedule 18 of the OATT. A Transmission Service Agreement shall be required for Local Service, MTF Service and OTF Service, and shall be required for Regional Network Service and Through or Out Service if the Transmission Customer has not executed a MPSA.

**Transmission Upgrade(s)** means an upgrade, modification or addition to the PTF that becomes subject to the terms and conditions of the OATT governing rates and service on the PTF on or after January 1, 2004. This categorization and cost allocation of Transmission Upgrades shall be as provided for in Schedule 12 of the OATT.

**UDS** is unit dispatch system software.

**Unconstrained Export Transaction** is defined in Section III.1.10.7(f)(iv) of Market Rule 1.

**Uncovered Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Uncovered Transmission Default Amounts** are defined in Section 3.4.f of the ISO New England Billing Policy.

**Unrated** means a Market Participant that is not a Rated Market Participant.

**Unsecured Covered Entity** is, collectively, an Unsecured Municipal Market Participant and an Unsecured Non-Municipal Covered Entity.

**Unsecured Municipal Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Unsecured Municipal Market Participant** is defined in Section 3.3(h) of the ISO New England Billing Policy.

**Unsecured Municipal Transmission Default Amount** is defined in Section 3.4.f of the ISO New England Billing Policy.

**Unsecured Non-Municipal Covered Entity** is a Covered Entity that is not a Municipal Market Participant or a Non-Market Participant Transmission Customer and has a Market Credit Limit or Transmission Credit Limit of greater than \$0 under the ISO New England Financial Assurance Policy.

**Unsecured Non-Municipal Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Unsecured Non-Municipal Transmission Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Unsecured Transmission Default Amounts** are, collectively, the Unsecured Municipal Transmission Default Amount and the Unsecured Non-Municipal Transmission Default Amount.

**Unsettled FTR Financial Assurance** is an amount of financial assurance required from a Designated FTR Participant as calculated pursuant to Section VI.B of the ISO New England Financial Assurance Policy.

**Updated Measurement and Verification Plan** is an optional Measurement and Verification Plan that may be submitted as part of a subsequent qualification process for a Forward Capacity Auction prior to the beginning of the Capacity Commitment Period of the On-Peak Demand Resource or Seasonal Peak Demand Response project. The Updated Measurement and Verification Plan may include updated project

specifications, measurement and verification protocols, and performance data as described in Section III.13.1.4.3.1.2 of Market Rule 1 and the ISO New England Manuals.

**VAR CC Rate** is the CC rate paid to Qualified Reactive Resources for VAR Service capability under Section IV.A of Schedule 2 of the OATT.

**VAR Payment** is the payment made to Qualified Reactive Resources for VAR Service capability under Section IV.A of Schedule 2 of the OATT.

**VAR Service** is the provision of reactive power voltage support to the New England Transmission System by a Qualified Reactive Resource or by other generators that are dispatched by the ISO to provide dynamic reactive power as described in Schedule 2 of the OATT.

**Virtual Cap** is \$2,000/MWh.

**Virtual Requirements** are determined in accordance with Section III.A(iv) of the ISO New England Financial Assurance Policy.

**Volt Ampere Reactive (VAR)** is a measurement of reactive power.

**Volumetric Measure (VM)** is a type of billing determinant under Schedule 2 of Section IV.A of the Tariff used to assess charges to Customers under Section IV.A of the Tariff.

**Wind High Limit** is the estimated power output (MW) of a wind Generator Asset given the Real-Time weather conditions, taking into account equipment outages, and absent any self-imposed reductions in power output or any reduction in power output as a result of a Dispatch Instruction, calculated in the manner described in the ISO Operating Documents.

**Wind Plant Future Availability** is the forecasted Real-Time High Operating Limit of a wind Generator Asset, calculated in the manner described in the ISO Operating Documents.

**Winter ARA Qualified Capacity** is described in Section III.13.4.2.1.2.1.1.2 of Market Rule 1.

**Winter Capability Period** means one of two time periods defined by the ISO for the purposes of rating and auditing resources pursuant to Section III.9. The time period associated with the Winter Capability Period is the period October 1 through May 31.

**Winter Intermittent Reliability Hours** are defined in Section III.13.1.2.2.2(c) of Market Rule 1.

**Year** means a period of 365 or 366 days, whichever is appropriate, commencing on, or on the anniversary of March 1, 1997. Year One is the Year commencing on March 1, 1997, and Years Two and higher follow it in sequence.

**Zonal Price** is calculated in accordance with Section III.2.7 of Market Rule 1.

**Zonal Capacity Obligation** is calculated in accordance with Section III.13.7.5.2 of Market Rule 1.

**Zonal Reserve Requirement** is the combined amount of TMSR, TMNSR, and TMOR required for a Reserve Zone as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**ATTACHMENT K**  
**REGIONAL SYSTEM PLANNING PROCESS**

**TABLE OF CONTENTS**

1. Overview
  - 1.1 Enrollment
  - 1.2 A List of Entities Enrolled in the Planning Region
  
2. Planning Advisory Committee
  - 2.1 Establishment
  - 2.2 Role of Planning Advisory Committee
  - 2.3 Membership
  - 2.4 Procedures
    - (a) Notice of Meetings
    - (b) Frequency of Meetings
    - (c) Availability of Meeting Materials
    - (d) Access to Planning-Related Materials that Contain CEII
  - 2.5 Local System Planning Process
  
3. RSP: Principles, Scope, and Contents
  - 3.1 Description of RSP
  - 3.2 Baseline of RSP
  - 3.3 RSP Planning Horizon and Parameters
  - 3.4 Other RSP Principles
  - 3.5 Market Responses in RSP
  - 3.6 The RSP Project List
    - (a) Elements of the Project List
    - (b) Periodic Updating of RSP Project List
    - (c) Project List Updating Procedures and Criteria
    - (d) Posting of LSP Project Status

4. Procedures for the Conduct of Needs Assessments, Treatment of Market Responses and Evaluation of Regulated Transmission Solutions

4.1 Needs Assessments

- (a) Triggers for Needs Assessments
- (b) ~~Requests by Stakeholders for Needs Assessments for Economic~~

~~Considerations~~[RESERVED]

- (c) Conduct of a Needs Assessment for Rejected De-List Bids
- (d) Notice of Initiation of Needs Assessments
- (e) Preparation of Needs Assessment
- (f) Treatment of Market Responses in Needs Assessments
- (g) Needs Assessment Support
- (h) Input from the Planning Advisory Committee
- (i) Publication of Needs Assessment and Response Thereto
- (j) Requirements for Use of Solutions Studies Rather than Competitive Solution Process for Projects Based on Year of Need

4.2 Evaluation of Regulated Transmission Solutions in Solutions Studies, Where Competitive Solution Process of Section 4.3 Is Not Applicable

- (a) Evaluation and Development of Regulated Transmission Solutions in Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades
- (b) Notice of Initiation of a Solutions Study
- (c) Classification of Regulated Transmission Solutions as Market Efficiency Transmission Upgrades or Reliability Transmission Upgrades
- (d) Evaluation Factors Used for Identification of the Preferred Solution
- (e) Identification of the Preferred Solution and Inclusion of Results of Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades in the RSP
- (f) Cancellation of a Solutions Study

4.3 Competitive Solution Process for Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades

- (a) Initiating the Competitive Solution Process
- (b) Use and Control of Right of Way

- (c) Information Required for Phase One Proposals; Study Deposit; Timing
- (d) LSP Coordination
- (e) Preliminary Review by ISO
- (f) Proposal Deficiencies: Further Information
- (g) Listing of Qualifying Phase One Proposals
- (h) Information Required for Phase Two Solutions;  
Identification and Reporting of Preliminary Preferred Phase Two Solution
- (i) Reimbursement of Phase Two Solution Costs; Collection and Refund of ISO  
Study Costs
- (j) Selection of the Preferred Phase Two Solution
- (k) Execution of Selected Qualified Transmission Project Sponsor Agreement
- (l) Failure to Proceed
- (m) Cancellation of a Request for Proposal

4A. Public Policy Transmission Studies; Public Policy Transmission Upgrades

4A.1 NESCOE Requests for Public Policy Transmission Studies

4A.1.1 Study of Federal Public Policy Requirements Not Identified by NESCOE; Local  
Public Policy Requirements

4A.2 Preparation for Conduct of Public Policy Transmission Studies; Stakeholder  
Input

4A.3 Public Policy Transmission Studies; Stakeholder Input

- (a) Conduct of Public Policy Transmission Studies; Stakeholder Input
- (b) Treatment of Market Solutions in Public Policy Transmission Studies

4A.4 Response to Public Policy Transmission Studies

4A.5 Use and Control of Right of Way

4A.6 Stage One Proposals

- (a) Information Required for Stage One Proposals
- (b) LSP Coordination
- (c) Preliminary Review by ISO
- (d) Proposal Deficiencies; Further Information
- (e) List of Qualifying Stage One Proposals

4A.7 Reimbursement of Stage One Proposal and Stage Two Solution Costs; Collection and  
Refund of ISO Study Costs



- 4A.8 Information Required for Stage Two Solutions; Identification and Reporting of Preliminary Preferred Stage Two Solution
- 4A.9 Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List; Milestone Schedules; Removal From RSP Project List
  - (a) Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List
  - (b) Execution of Selected Qualified Transmission Project Sponsor Agreement
  - (c) Failure to Proceed
- 4A.10 Cancellation of a Request for Proposal
- 4A.11 Local Public Policy Transmission Upgrades
- 4B. Qualified Transmission Project Sponsors
  - 4B.1 Periodic Evaluation of Applications
  - 4B.2 Information To Be Submitted
  - 4B.3 Review of Qualifications
  - 4B.4 List of Qualified Transmission Project Sponsors
  - 4B.5 Annual Certification
- 5. Supply of Information and Data Required for Regional System Planning
- 6. Regional, Local and Interregional Coordination
  - 6.1 Regional Coordination
  - 6.2 Local Coordination
  - 6.3 Interregional Coordination
    - (a) Interregional Coordination and Cost Allocation Among ISO, New York Independent System Operator, Inc. (“NYISO”) and PJM Interconnection, L.L.C (“PJM”) Under Order No. 1000
    - (b) Other Interregional Assessments and Other Interregional Transmission Projects
- 7. Procedures for Development and Approval of the RSP
  - 7.1 Initiation of RSP
  - 7.2 Draft RSP; Public Meeting
  - 7.3 Action by the ISO Board of Directors on RSP; Request for Alternative Proposals

- (a) Action by ISO Board of Directors on RSP
  - (b) Requests for Alternative Proposals
- 8. Obligations of PTOs to Build; PTOs' Obligations, Conditions and Rights
- 9. Merchant Transmission Facilities
  - 9.1 General
  - 9.2 Operation and Integration
  - 9.3 Control and Coordination
- 10. Cost Responsibility for Transmission Upgrades
- 11. Allocation of ARR
- 12. Dispute Resolution Procedures
  - 12.1 Objective
  - 12.2 Confidential Information and CEII Protections
  - 12.3. Eligible Parties
  - 12.4 Scope
    - (a) Reviewable Determinations
    - (b) Material Adverse Impact
  - 12.5 Notice and Comment
  - 12.6 Dispute Resolution Procedures
    - (a) Resolution Through the Planning Advisory Committee
    - (b) Resolution Through Informal Negotiations
    - (c) Resolution Through Alternative Dispute Resolution
  - 12.7 Notice of Dispute Resolution Process Results
- 13. Rights Under The Federal Power Act
- 14. Annual Assessment of Transmission Transfer Capability

- 15. Procedures for the Conduct of Cluster Enabling Transmission Upgrades Regional Planning Study
  - 15.1 Notice of Initiation of Cluster Enabling Transmission Upgrade Regional Planning Study in Support of Cluster Studies under the Interconnection Procedures
  - 15.2 Preparation for Conduct of CRPS; Stakeholder Input
  - 15.3 Conduct of the CRPS
  - 15.4 Publication of the CRPS
- 16. Procedures for the Conduct of Longer-Term Transmission Studies
  - 16.1 Request for Longer-Term Transmission Studies
  - 16.2 Preparation for Conduct of the Longer-Term Transmission Studies; Stakeholder Input
  - 16.3 Conduct of the Longer-Term Transmission Study; Stakeholder Input
- 17. Procedures for the Conduct of Economic Studies
  - 17.1 Overview
  - 17.2 Economic Study Reference Scenarios
    - (a) Benchmark Scenario
    - (b) Market Efficiency Needs Scenario
    - (c) Policy Scenario
    - (d) Stakeholder-Requested Scenario
  - 17.3 Frequency, Initiation, and Schedule
  - 17.4 Preparation of the Economic Study Reference Scenarios and Stakeholder Sensitivity Requests
  - 17.5 Market Efficiency Needs Assessment
  - 17.6 Evaluation of Regulated Transmission Solutions for Market Efficiency Transmission Upgrades
  - 17.7 Stakeholder Input on Study Results
  - 17.8 Economic Studies Requested by Individual Stakeholders
  - 17.9 Cost Recovery
  - 17.10 Coordination with PTOs

APPENDIX 2 – LIST OF ENTITIES ENROLLED IN THE TRANSMISSION PLANNING REGION

APPENDIX 3 – LIST OF QUALIFIED TRANSMISSION PROJECT SPONSORS

## **1. Overview**

This Attachment describes the regional system planning process conducted by the ISO, as well as the coordination with transmission-owning entities in, or other entities interconnected to, the New England Transmission System and neighboring systems to ensure the reliability of the New England Transmission System and compliance with national and regional planning standards, criteria and procedures, while accounting for market performance, economic, environmental, and other considerations, as may be agreed upon from time to time. The New England Transmission System is comprised of PTF, Non-PTF, OTF and MTF within the New England Control Area that is under the ISO's operational authority or control pursuant to the ISO Tariff and/or various transmission operating agreements. This Attachment describes the regional system planning process for the PTF conducted by the ISO, and local system planning process conducted by the PTOs, pursuant to their responsibilities defined in the Tariff, the various transmission operating agreements and this Attachment. Additional details regarding the regional system planning process are also provided in the ISO New England Planning Procedures and ISO New England Operating Procedures, which are available on the ISO's website.

The ISO shall conduct the regional system planning process for the PTF in coordination with the transmission-owning entities in, or other entities interconnected to, the New England Transmission System and neighboring systems, consistent with the rights and obligations defined in the Tariff, applicable transmission operating agreements and this Attachment. As described in this Attachment's Section 6 and Appendix 1, entitled "Attachment K -Local System Planning Process", the PTOs are responsible for the Local System Planning ("LSP") process for the Non-PTF in the New England Transmission System. As also described in Section 6, and pursuant to the Tariff and/or transmission operating agreements, the OTOs and MTOs are required to participate in the ISO's regional system planning process for reliability purposes and to perform and/or support studies of the impact of regional system planning projects on their respective OTF and MTF.

The regional system planning process described in this Attachment provides for the ISO to undertake assessments of the needs of the PTF system on a systemwide or specific area basis. These assessments shall be referred to as Needs Assessments, as described in Section 4.1 of this Attachment. The ISO shall incorporate market responses that have met the criteria specified in Sections 4.1(f) and 4A.3(b) of this Attachment into the Needs Assessments, Public Policy Transmission Studies or the Regional System Plan ("RSP"), described below. Where market responses incorporated into the Needs Assessments or Public

Policy Transmission Studies do not eliminate or address the needs identified by the ISO in Needs Assessments, Public Policy Transmission Studies or the RSP, the ISO shall develop or evaluate, pursuant to Sections 4.2(b), 4.3, or 4A of this Attachment, as applicable, regulated transmission solutions proposed in response to the needs identified by the ISO.

Pursuant to Sections 3 and 7 of this Attachment, the ISO shall develop the RSP for approval by the ISO Board of Directors following stakeholder input through the Planning Advisory Committee established pursuant to Section 2 of this Attachment. The RSP is a compilation of the regional system planning process activities conducted by the ISO. The RSP shall address needs of the PTF system determined by the ISO through Needs Assessments initiated and updated on an ongoing basis by the ISO to: (i) account for changes in the PTF system conditions; (ii) ensure reliability of the PTF system; (iii) comply with national and regional planning standards, criteria and procedures; and (iv) account for market performance, economic, environmental and other considerations as may be agreed upon from time to time.

As more fully described in Section 3 of this Attachment, the RSP shall identify:

- (i) PTF system reliability and market efficiency needs,
- (ii) the requirements and characteristics of the types of resources that may satisfy PTF system reliability and market efficiency needs to provide stakeholders an opportunity to develop and propose efficient market responses to meet the needs identified in Needs Assessments;
- (iii) regulated transmission solutions to meet the needs identified in Needs Assessments where market responses do not address such needs or additional transmission infrastructure may be required to comply with national and regional planning standards, criteria and procedures or provide market efficiency benefits in accordance with Attachment N of this OATT; and
- (iv) those projects identified through the Public Policy procedures described in Section 4A of this Attachment K.

In addition, the RSP shall also provide information on a broad variety of power system requirements that serves as input for reviewing the design of the markets and the overall economic performance of the system. The RSP shall also describe the coordination of the ISO's regional system plans with regional, local and inter-area planning activities.

Pursuant to Section 3.6 of this Attachment, the ISO shall also develop, maintain and post on its website a cumulative list reflecting the regulated transmission solutions proposed in response to Needs Assessments (the "RSP Project List"). The RSP Project List shall be a cumulative representation of the regional transmission planning expansion efforts ongoing in New England.

### **1.1 Enrollment**

For purposes of participating as a transmission provider in the New England transmission planning region pursuant to this Attachment K, and distinct from Transmission Providers as defined in Section I of this Tariff, an entity chooses to enroll by executing (or having already executed) a: (i) transmission operating agreement with the ISO, or (ii) a Market Participant Service Agreement coupled with a written notification to the ISO that the entity desires to be a transmission provider in the New England region. Such enrollment in the transmission planning region is not necessary to participate in the Planning Advisory Committee, which is open to any entity as described in Section 2.3 of this Attachment K.

### **1.2 A List of Entities Enrolled in the Planning Region**

A list of entities enrolled in the transmission planning region as transmission providers as described in Section 1.1. above, is included as Appendix 2 of this Attachment K.

## **2. Planning Advisory Committee**

### **2.1 Establishment**

A Planning Advisory Committee shall be established by the ISO to perform the functions set forth in Section 2.2 of this Attachment. It shall have a Chair and Secretary, who shall be appointed by the chief executive officer of the ISO or his or her designee. Before appointing an individual to the position of the Chair or Secretary, the ISO shall notify the Planning Advisory Committee of the proposed assignment and, consistent with its personnel practices, provide any other information about the individual reasonably requested by the Planning Advisory Committee. The chief executive officer of the ISO or his or her designee shall consider the input of the members of the Planning Advisory Committee in selecting,

removing or replacing such officers. The Planning Advisory Committee shall be advisory only and shall have no formal voting protocol.

The ISO may form subcommittees that, at the discretion of the ISO, may report to the Planning Advisory Committee.

## **2.2 Role of Planning Advisory Committee**

The Planning Advisory Committee may provide input and feedback to the ISO concerning the regional system planning process, including the development of and review of Needs Assessments, the conduct of Solutions Studies, the development of the RSP, and updates to the RSP Project List. Specifically, the Planning Advisory Committee serves to review and provide input and comment on: (i) the development of the RSP, (ii) assumptions for studies, (iii) the results of Needs Assessments, Solutions Studies, and competitive solutions developed pursuant to Section 4.3 of this Attachment, (iv) potential market responses to the needs identified by the ISO in a Needs Assessment or the RSP, (v) Cluster Enabling Transmission Upgrades Regional Planning Studies, and (vi) Longer-Term Transmission Studies. The Planning Advisory Committee, with the assistance of and in coordination with the ISO, serves also to identify and prioritize ~~requests~~ [the Stakeholder-Requested Scenario and stakeholder-requested scenario sensitivities](#) for Economic Studies to be performed by the ISO, and provides input and feedback to the ISO concerning the conduct of Economic Studies and Public Policy Transmission Studies, including the criteria and assumptions for such studies. Based on input and feedback related to the regional system planning process provided by the Planning Advisory Committee to the ISO, the ISO shall consult with the appropriate NEPOOL technical committees, including but not limited to, the Markets, Reliability and Transmission Committees, on issues and concerns identified by the Planning Advisory Committee as requiring further investigation and consideration of potential changes to ISO New England Operating Documents.

## **2.3 Membership**

There are no membership requirements to become part of the Planning Advisory Committee. Meetings are open to members of any entity, including State regulators or agencies and NESCOE, subject to the Critical Energy Infrastructure Information (“CEII”) policy as further described in Section 2.4(d) of this Attachment. To be added to the Planning Advisory Committee email distribution list, an email address shall be provided to the Secretary of the Committee. Throughout this Attachment K, a member of the



Planning Advisory Committee refers to any individual, whether they attend Planning Advisory Committee meetings or are included on the email distribution list.

## **2.4 Procedures**

### **(a) Notice of Meetings**

Prior to the beginning of each year, the ISO shall list on the ISO Calendar, which is available on the ISO's website, the proposed meeting dates for the Planning Advisory Committee for each month of the year. Prior to a Planning Advisory Committee meeting, the ISO shall provide notice to the Planning Advisory Committee by electronic email with the date, time, format for the meeting (i.e., in person or teleconference), and the purpose for the meeting.

### **(b) Frequency of Meetings**

Meetings of the Planning Advisory Committee shall be held as frequently as necessary to serve the purposes stated in Section 2.2 of this Attachment and as further specified elsewhere in this Attachment, generally expected to be no less than four (4) times per year.

### **(c) Availability of Meeting Materials**

The ISO shall post materials for Planning Advisory Committee meetings on the Planning Advisory Committee section on the ISO's website prior to meetings. The materials for the Planning Advisory Committee meetings shall be made available to the members of the Planning Advisory Committee subject to protections warranted by confidentiality requirements of the ISO New England Information Policy set forth in Attachment D of the ISO Tariff and Critical Energy Infrastructure Information ("CEII") policy as further described in Section 2.4(d) of this Attachment.

### **(d) Access to Planning-Related Materials that Contain CEII**

CEII is defined as specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that:

- (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
- (ii) Could be useful to a person in planning an attack on critical infrastructure;
- (iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and
- (iv) Does not simply give the location of critical infrastructure.

CEII pertains to existing and proposed system and assets, whether physical or virtual, the incapacity or destruction of which would negatively affect security, economic security, public health or safety, or any combination of those matters. CEII does not include information that is otherwise publicly available. Simplified maps and general information on engineering, vulnerability, or design that relate to production, generation, transportation, transmission or distribution of energy shall not constitute CEII.

Planning-related materials determined to be CEII will be posted on the ISO's password-protected website. To obtain access to planning-related materials determined to be CEII, the entity seeking to obtain such access must contact the ISO's Customer Service department. Authorized Market Participants or their representatives, such as consultants, are bound by the ISO New England Information Policy and will be able to access CEII materials through the ISO's password-protected website. State and federal governmental agency employees and their consultants will be able to access such materials through the ISO's password-protected website upon submittal of a signed non-disclosure agreement, which is available on the ISO's website. Personnel of the ERO, NPCC, other regional transmission organizations or independent system operators, and transmission owners from neighboring regions will be able to access CEII materials pursuant to governing agreements, rules and protocols. All external requests by other persons for planning-related materials determined to be CEII shall be recorded and tracked by ISO's Customer Services staff. Such requestors will be able to obtain access to CEII documents filed with the Commission pursuant to the Commission's regulations governing access to CEII. To the extent a requestor seeks access to planning-related material that is not filed with the Commission, such requestor shall comply with the requirements provided in the CEII procedures of the ISO, available on the ISO's website, prior to receiving access to CEII

information. Upon compliance with the ISO's CEII procedures, the ISO shall grant the requestor access to the planning-related CEII document through direct distribution or access to the ISO password-protected website.

## **2.5 Local System Planning Process**

The LSP process described in Appendix 1 to this Attachment applies to the transmission system planning for the Non-PTF in the New England Transmission System. The PTOs will utilize interested members of the Planning Advisory Committee for advisory stakeholder input in the LSP process that will meet, as needed, at the conclusion of, or independent of, scheduled Planning Advisory Committee meetings. The LSP meeting agenda and meeting materials will be developed by representatives of the pertinent PTOs and PTO representatives will chair the LSP meeting. The ISO will post the LSP agenda and materials for LSP.

## **3. RSP: Principles, Scope, and Contents**

### **3.1 Description of RSP**

The ISO shall develop the RSP based on periodic comprehensive assessments (conducted not less than every third year) of the PTF systemwide needs to maintain the reliability of the New England Transmission System while accounting for market efficiency, economic, environmental, and other considerations, as agreed upon from time to time. The ISO shall update the RSP to reflect the results of ongoing Needs Assessments conducted pursuant to Section 4.1 of this Attachment. The RSP shall also account for projected improvements to the PTF that are needed to maintain system reliability in accordance with national and regional standards and the operation of efficient markets under a set of planning assumptions.

The RSP shall, among other things:

- (i) describe, in a consolidated manner, the assessment of the PTF system needs, the results of such assessments, and the projected improvements;
- (ii) provide the projected annual and peak demands for electric energy for a five-to ten-year horizon, the needs for resources over this period and how such resources are expected to be provided;

- (iii) specify the physical characteristics of the physical solutions that can meet the needs defined in the Needs Assessments and include information on market responses that can address them; and
- (iv) provide sufficient information to allow Market Participants to assess the quantity, general locations, operating characteristics and required availability criteria of the type of incremental supply or demand-side resources, or merchant transmission projects, that would satisfy the identified needs or that may serve to modify, offset or defer proposed regulated transmission upgrades.

The RSP shall also include a description of proposed regulated transmission solutions that, based on the Solutions Studies described in Section 4.2 of this Attachment and the competitive solution process described in Section 4.3 of this Attachment, meets the needs identified in the Needs Assessments. To this end, as further described in Section 3.6 below, the ISO shall develop and maintain a RSP Project List, a cumulative listing of proposed regulated transmission solutions classified, to the extent known, as Reliability Transmission Upgrades, Market Efficiency Transmission Upgrades, and Public Policy Transmission Upgrades (which, for the foregoing types of upgrades, may include the portions of Interregional Transmission Projects located within the New England Control Area) and of External Transmission Projects. The RSP shall also provide reasons for any new regulated transmission solutions or Transmission Upgrades included in the RSP Project List, any change in status of a regulated transmission solution or Transmission Upgrade in the RSP Project List, or for any removal of regulated transmission solutions or Transmission Upgrades from the RSP Project List that are known as of that time.

Each RSP shall be built upon the previous RSP.

### **3.2 Baseline of RSP**

The RSP shall account for: (i) all projects that have met milestones, including market responses and regulated transmission solutions (e.g., planned demand-side projects, generation and transmission projects and Elective Transmission Upgrades) as determined by the ISO, in collaboration with the Planning Advisory Committee, pursuant to Sections 4.1, 4.2, 4.3, and 4A of this Attachment; and (ii) the

requirements for system operation and restoration services, not including the development of a system operations or restoration plan, which is outside the scope of the regional system planning process.

### **3.3 RSP Planning Horizon and Parameters**

The RSP shall be based on a five-to ten-year planning horizon, and reflect five-to ten-year capacity and load forecasts.

The RSP shall conform to: Good Utility Practice; applicable Commission compliance requirements related to the regional system planning process; applicable reliability principles, guidelines, criteria, rules, procedures and standards of the ERO, NPCC, and any of their successors; planning criteria adopted and/or developed by the ISO; Transmission Owner criteria, rules, standards, guides and policies developed by the Transmission Owner for its facilities consistent with the ISO planning criteria, the applicable criteria of the ERO and NPCC; local transmission planning criteria; and the ISO New England Planning Procedures and ISO New England Operating Procedures, as they may be amended from time to time (collectively, the “Planning and Reliability Criteria”).

The revisions to this Attachment K submitted to comply with FERC’s Order No. 1000 shall not apply to any Proposed or Planned project included in an RSP approved by the ISO Board of Directors (or in an RSP Project List update) prior to the May 18, 2015 effective date of the Order No. 1000 compliance filing of the ISO and the PTOs, unless the ISO is re-evaluating the solution design for such project as of that effective date, or subsequently determines that the solution design for such project requires re-evaluation.

### **3.4 Other RSP Principles**

The RSP shall be designed and implemented to: (i) avoid unnecessary duplication of facilities; (ii) identify facilities that are necessary to meet Planning and Reliability Criteria; (iii) avoid the imposition of unreasonable costs upon any Transmission Owner, Transmission Customer or other user of a transmission facility; (iv) take into account the legal and contractual rights and obligations of the Transmission Owners and the transmission-related legal and contractual rights and obligations of any other entity; (v) provide for coordination with existing transmission systems and with appropriate inter-area and local expansion plans; and (vi) properly coordinate with market responses, including, but not limited to generation, merchant transmission and demand-side responses.

### **3.5 Market Responses in RSP**

Market responses shall include investments in resources (e.g., demand-side projects, generation and distributed generation) and Elective Transmission Upgrades and shall be evaluated by the ISO, in consultation with the Planning Advisory Committee, pursuant to Sections 4.1(f), 4A.3(b), and 7 of this Attachment.

In developing the RSP, the ISO shall account for market responses: (i) proposed by Market Participants as addressing needs (and any critical time constraints for addressing such needs) identified in an RSP, Needs Assessment, or Public Policy Transmission Study; and (ii) that have proved to be viable by meeting the criteria specified in Section 4.1(f) or 4A.3(b) of this Attachment, as applicable.

Specifically, market responses that are identified to the ISO and are determined by the ISO, in consultation with the Planning Advisory Committee, to be sufficient to alleviate the need for a particular regulated transmission solution or Transmission Upgrade, based on the criteria specified in the pertinent Needs Assessment or RSP, and are judged by the ISO to be achievable within the required time period, shall be reflected in the next RSP and/or in a new or updated Needs Assessment. That particular regulated transmission solution or Transmission Upgrade may continue to be included in the appropriate category on the RSP Project List (as described in Section 3.6 below), subject to the ISO having the flexibility to indicate that the project should proceed at a later date or it may be removed if it is determined to be no longer needed. If the market response does not fully address the defined needs, or if additional transmission infrastructure is required to facilitate the efficient operation of the market, the RSP shall also include that particular regulated transmission solution or Transmission Upgrade, subject to the ISO having the flexibility to indicate that the Transmission Upgrade or regulated transmission solution should proceed at a later date and be modified, if necessary.

### **3.6 The RSP Project List**

#### **(a) Elements of the RSP Project List**

The RSP Project List shall identify regulated transmission solutions proposed in response to the needs identified in a RSP or Needs Assessments conducted pursuant to Section 4.1 of this Attachment, and shall identify Public Policy Transmission Upgrades identified pursuant to Section 4A of this Attachment. The RSP Project List shall identify the proposed regulated transmission solutions separately as a Reliability Transmission

Upgrade, a Market Efficiency Transmission Upgrade, or a Public Policy Transmission Upgrade.

With regard to Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades, the following subcategories will be utilized to indicate the status of each proposed regulated transmission solution in the evaluation process. These subcategories include: (i) Proposed; (ii) Planned; (iii) Under Construction; and (iv) In-Service. A Public Policy Transmission Upgrade will be identified in the RSP Project List as (i) Proposed; (ii) Planned; (iii) Under Construction; or (iv) In-Service.

The regulated transmission solution subcategories are defined as follows:

(i) For purposes of Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades, “Proposed” shall include a regulated transmission solution that (a) has been proposed in response to a specific need identified by the ISO in a Needs Assessment or the RSP and (b) has been evaluated or further defined and developed in a Solutions Study, as specified in Section 4.2(a) of this Attachment, or in the competitive solutions process specified in Section 4.3 of this Attachment, such that there is significant analysis that supports a determination by the ISO, as communicated to the Planning Advisory Committee, that the proposed regulated transmission solution would likely meet the need identified by the ISO in a Needs Assessment or the RSP, but has not received approval by the ISO under Section I.3.9 of the Tariff.

For purposes of Public Policy Transmission Upgrades, “Proposed” means that the ISO has included the project in the RSP Project List pursuant to the procedures described in Section 4A of this Attachment K, but that the project has not yet been approved by the ISO under Section I.3.9 of the Tariff.

(ii) “Planned” shall include a Transmission Upgrade that has met the requirements for a Proposed project and has been approved by the ISO under Section I.3.9 of the Tariff.

(iii) “Under Construction” shall include a Transmission Upgrade that has received the approvals required under the Tariff and engineering and construction is underway.

(iv) “In Service” shall include a Transmission Upgrade that has been placed in commercial operation.

The RSP Project List shall also list External Transmission Projects for which cost allocation and, if applicable, operating agreements have been accepted by the Commission, and indicate whether such External Transmission Projects are proposed, under construction or in service.

Each Reliability Transmission Upgrade and Market Efficiency Transmission Upgrade shall be cross-referenced to the specific systemwide or area needs identified in a Needs Assessment or RSP. Each proposed Public Policy Transmission Upgrade shall be cross-referenced in the RSP Project List to a specific Public Policy Transmission Study.

For completeness, the RSP Project List shall also include Elective Transmission Upgrades and transmission facilities (as determined under the ISO interconnection process specified in this OATT) to be built to accommodate new generation, and Elective Transmission Upgrades that have satisfied the requirements of this OATT.

An Interregional Transmission Project developed pursuant to Section 6.3 of this Attachment K may displace a regional Reliability Transmission Upgrade or Market Efficiency Transmission Upgrade on the RSP Project List where the ISO has determined that the Interregional Transmission Project is a more efficient or cost-effective solution. In the case of an Interregional Transmission Project that could meet the needs met by a Public Policy Transmission Upgrade, the associated Public Policy Transmission Upgrade may be removed from the RSP Project List in the circumstances described, and using the procedures specified, in Section 4A of Attachment K.

**(b) Periodic Updating of RSP Project List**



The RSP Project List will be updated by the ISO periodically by adding, removing or revising regulated transmission solutions or Transmission Upgrades in consultation with the Planning Advisory Committee and, as appropriate, the Reliability Committee.

Updating of the RSP Project List shall be considered an update of the RSP to be reflected in the next RSP, as appropriate, pursuant to Section 3.1 of this Attachment.

**(c) RSP Project List Updating Procedures and Criteria**

As part of the periodic updating of the RSP Project List, the ISO: (i) shall modify (in accordance with the provisions of this Attachment) regulated transmission solutions or Transmission Upgrades to reflect changes to the PTF system configurations, including ongoing investments by Market Participants or other stakeholders; (ii) may add to and classify accordingly, regulated transmission solutions; (iii) may remove from the RSP Project List regulated transmission solutions or Transmission Upgrades previously identified in the RSP Project List if the ISO determines that the need for the proposed regulated transmission solution or the approved Transmission Upgrade no longer exists or is no longer feasible; and (iv) may remove from the RSP Project List regulated transmission solutions or Transmission Upgrades that have been displaced by an Interregional Transmission Project in the circumstances described in Section 3.6(a) of this Attachment. With regard to (iii) above, this may include a removal of a regulated transmission solution or Transmission Upgrade because a market response meeting the need reaches the maturity specified in Sections 4.1(f) or 4A.3(b) of this Attachment and has been determined, pursuant to Sections 4.1(f) or 4A.3(b) of this Attachment, to meet the need described in the pertinent Needs Assessment, Public Policy Transmission Study or RSP, as applicable. In doing so, the ISO shall consult with and consider the input from the Planning Advisory Committee and, as appropriate, the Reliability Committee. In addition, the ISO shall remove from the RSP Project List any Public Policy Transmission Upgrade if the ISO determines, with input from the Planning Advisory Committee, that the need to which the Public Policy Transmission Upgrade responds no longer exists.

If a regulated transmission solution or Transmission Upgrade is removed from the RSP Project List by the ISO, the entity responsible for the construction of the regulated

transmission solution or Transmission Upgrade shall be reimbursed for any costs prudently incurred or prudently committed to be incurred (plus a reasonable return on investment at existing Commission-approved ROE levels) in connection with the planning, designing, engineering, siting, permitting, procuring and other preparation for construction, and/or construction of the regulated transmission solution or Transmission Upgrade proposed for removal from the RSP Project List. The provisions of Schedule 12, Schedule 13 and Schedule 14 of this OATT shall apply to any cost reimbursement under this Section. Prior to finalizing the RSP, the ISO shall provide the Planning Advisory Committee with written information explaining the reasons for any removal under this Section.

**(d) Posting of LSP Project Status**

Each PTO will be individually responsible for publicly posting and updating the status of its respective LSP and the transmission projects arising therefrom on its company website. The ISO's posting of the RSP Project Lists will include links to each PTO's specific LSP posting to be provided to the ISO by the PTOs.

**4. Procedures for the Conduct of Needs Assessments, Treatment of Market Responses and Evaluation of Regulated Transmission Solutions**

**4.1 Needs Assessments**

The regional system planning process established in this Attachment K has three different processes. The reliability planning process established in this Attachment K shall apply to all transmission solutions adopted to resolve a reliability need. The market efficiency planning process established in this Attachment K shall apply to all transmission solutions adopted to resolve a market efficiency need. The public policy planning process established in this Attachment K shall apply to all transmission solutions adopted to resolve a public policy need.

As described further in Section 4.1(a) below, the planning process in Section 17 of this Attachment K shall be used to identify market efficiency issues and, along with Section 4.1(a), trigger market efficiency Needs Assessments. Market efficiency Needs Assessments shall be conducted pursuant to this Section 4.

For needs identified initially as reliability, market efficiency or public policy needs, the collateral benefits of potential solutions to those needs shall not change the planning process applicable to those identified needs; notwithstanding the foregoing, the ISO shall report its views as to whether a project or preferred solution may also satisfy identified reliability needs of the system as described in Section 4A.8 of this Attachment K. Sections 4.1 through 4.3 of this Attachment are not applicable to the planning of Public Policy Transmission Upgrades, which is governed instead by Section 4A of this Attachment.

On a regular and ongoing basis, the ISO, in coordination with the PTOs and the Planning Advisory Committee, shall conduct assessments (i.e., Needs Assessments) of the adequacy of the PTF system, as a whole or in part, to maintain the reliability of such facilities [\(i.e., reliability Needs Assessment\)](#) while [promoting and](#) the operation of efficient wholesale electric markets in New England [\(i.e., market efficiency Needs Assessment\)](#). A Needs Assessment shall analyze whether the PTF in the New England Transmission System: (i) meet applicable reliability standards; (ii) have adequate transfer capability to support local, regional, and inter-regional reliability; (iii) support the efficient operation of the wholesale electric markets; (iv) are sufficient to integrate new resources and loads on an aggregate or regional basis; or (v) otherwise examine various aspects of its performance and capability. A Needs Assessment shall also identify: (i) the location and nature of any potential problems with respect to the PTF and (ii) situations that significantly affect the reliable and efficient operation of the PTF along with any critical time constraints for addressing the needs of the PTF to facilitate the development of market responses and to initiate the pursuit of regulated transmission solutions.

**(a) Triggers for Needs Assessments**

The ISO, in coordination with the PTOs and the Planning Advisory Committee, shall perform Needs Assessments, inter alia, as needed to:

- Assess compliance with reliability standards and criteria (including those established by the ISO, NERC, and NPCC) consistent with the long term needs of the system.
- Assess the adequacy of the transmission system capability, such as transfer capability, to support local, regional and interregional reliability.
- Assess the efficient operation of the wholesale electric market. (See Attachment N regarding the identification of market efficiency upgrades).

- Assess sufficiency of the system to integrate new resources and loads on an aggregate or regional basis as needed for the reliable and efficient operation of the system.
- Analyze various aspects of system performance. (Including but not limited to, transient network analysis, small signal analysis, electromagnetic transients program analysis, or delta P analysis).
- Examine short circuit performance of the system.
- Assess the ability to efficiently operate and maintain the transmission system.
- Address ~~requests for an economic study consistent with section 4.1.b of Attachment K~~ market efficiency issues.
- Address system performance in consideration of de-list bids and cleared demand bids consistent with sections 4.1(c) and 4.1(f) of Attachment K.
- Address system performance as otherwise deemed appropriate by the ISO.

**(b) [RESERVED]Requests by Stakeholders for Needs Assessments for Economic Considerations**

~~The ISO's stakeholders may request the ISO to initiate a Needs Assessment to examine situations where potential regulated transmission solutions or market responses or investments could result in (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of this OATT, (ii) reduced congestion, or (iii) the integration of new resources and/or loads on an aggregate or regional basis (an "Economic Study").~~

~~Requests for Economic Studies shall be submitted, considered and prioritized as follows:~~

~~(i) — By no later than April 1 of each year, any stakeholder may submit to the ISO for public posting on the ISO's website a request for an Economic Study.~~

~~(ii) — The ISO shall thereafter add any of its own proposals for Economic Studies. The ISO shall also develop a rough work scope and cost estimate for all requested Economic Studies, and develop~~

~~preliminary prioritization based on the ISO's perceived regional and/or, as coordinated with the applicable neighboring system, inter-area benefits to assist stakeholders in the prioritization of Economic Studies.~~

~~(iii) — By no later than May 1 of each year, the ISO shall provide the foregoing information to the Planning Advisory Committee, and a Planning Advisory Committee meeting shall be held at which Economic Study proponents will provide an explanation of their request.~~

~~(iv) — By no later than June 1 of each year, the ISO shall hold a meeting of the Planning Advisory Committee for the members of the Planning Advisory Committee to discuss, identify and prioritize, as further facilitated by the ISO's preparation of a straw priority list to be further discussed at such meeting, up to two (2) Economic Studies (the costs of which will be recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff) to be performed by the ISO in a given year taking into consideration their impact on the ISO budget and other priorities. The ISO may consider performing up to three (3) Economic Studies if a Public Policy Transmission Study will not be concurrently performed.~~

~~(v) — The ISO and the Planning Advisory Committee may agree to hold additional meetings to further discuss and resolve any issue concerning the substance of the Economic Studies themselves and/or their prioritization.~~

~~(vi) — If the Planning Advisory Committee, after discussions between the Planning Advisory Committee and ISO management, is not able to prioritize the Economic Studies to be performed by the ISO in a given year, any member of the Planning Advisory Committee must submit a request for Regional Planning Dispute Resolution Process pursuant to Section 12 of this Attachment, such request to be submitted no later than August 30, to resolve the issues concerning the substance of the Economic Studies themselves and/or their prioritization.~~

~~(vii) — The ISO will issue a notice to the Planning Advisory Committee detailing the prioritization of the Economic Studies as identified by the Planning Advisory Committee or, if a request for Regional Planning Dispute Resolution Process is submitted pursuant to Section 4.1.(b)(vi), as determined through that Process.~~

~~The foregoing timelines are subject to adjustment as determined by the ISO in coordination with the Planning Advisory Committee. The ISO will provide periodic updates on the status of Economic Studies to the Planning Advisory Committee.~~

~~Economic Study requests not within the three studies identified in Section 4.1(b)(iv) to be performed in a given year may be requested and paid for by the study proponent.~~

**(c) Conduct of a Needs Assessment for Rejected De-List Bids**

- (i) In the case of a rejected Static De-List Bid or Dynamic De-List Bid, the ISO may as warranted, with advisory input from the Reliability Committee, examine the unavailability of the resource(s) with the rejected bid as a sensitivity in a Needs Assessment, or examine the unavailability of the resource(s) in the base representation in a Needs Assessment. The ISO may as warranted, with advisory input from the Reliability Committee, initiate a Needs Assessment for the purpose of modeling rejected Static De-List Bids or Dynamic De-List Bids where the ISO believes that the initiation of such a study is warranted.
- (ii) Prior to the start of each New Capacity Show of Interest Submission Window, the ISO shall present to the Reliability Committee the status of any prior rejected Dynamic De-List Bids, Static De-List Bids, Permanent De-List Bids or Retirement De-List Bids being studied in the regional system planning process.

**(d) Notice of Initiation of Needs Assessments**

Prior to its commencement, the ISO shall provide notice of the initiation of a Needs Assessment to the Planning Advisory Committee consistent with Section 2 of this Attachment.

**(e) Preparation of Needs Assessment**

Needs Assessments may examine resource adequacy, transmission adequacy, projected congestion levels and other relevant factors as may be agreed upon from time to time. Needs Assessments shall also consider the views, if any, of the Planning Advisory Committee, State regulators or agencies, NESCOE, the Market Advisor to the ISO Board of Directors, and the ISO

Board of Directors. A corresponding assessment shall be performed by the PTOs to identify any needs relating to the Non-PTF transmission facilities (of whatever voltage) that could affect the provision of Regional Transmission Service over the PTF.

**(f) Treatment of Market Responses in Needs Assessments**

The ISO shall reflect proposed market responses in the regional system planning process. Market responses may include, but are not limited to, resources (e.g., demand-side projects and distributed generation), and Elective Transmission Upgrades.

In performing Needs Assessments, the ISO shall rely on certain resources to prevent the identification of system needs. Specifically, the ISO shall incorporate or update information regarding future resources, with the exception of imports across external tie lines, in Needs Assessments that have been proposed and (i) have cleared in a Forward Capacity Auction pursuant to Market Rule 1 of the ISO Tariff, (ii) have been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) have been forecast in the ISO's Forecast Report of Capacity, Energy, Loads and Transmission. The ISO shall also incorporate or update information regarding all existing resources, with the exception of imports across external tie lines, in Needs Assessments. Imports across future or existing external tie lines will not be relied upon unless such imports (i) have a Capacity Supply Obligation corresponding to the year of study, (ii) have been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) may be represented by a minimum flow based on HQ Interconnection Capability Credits. The ISO will model out-of-service all submitted Retirement De-List Bids, submitted Permanent De-List Bids, and demand bids that have cleared in a substitution auction, and may model out-of-service rejected-for-reliability Static De-List Bids and rejected-for-reliability Dynamic De-List Bids from the most recent Forward Capacity Auction. With respect to having been selected in, and being contractually bound by a state-sponsored request for proposals, or having a financially binding obligation pursuant to a contract, demonstration of such contracts is accomplished through submittal for ISO review of an order or other similar authorization from the appropriate state regulatory agency, along with a copy of the contract, that together demonstrate the contractual requirements. These documents may be submitted by: the Project Sponsor; the state regulatory

agency authorizing the contract; a transmission company that is a counterparty to the contract; or by a third-party organization representing the interests of the New England states regarding energy related issues, such as NESCOE. The ISO shall incorporate or update information regarding a proposed Elective Transmission Upgrade in a Needs Assessment at a time after the studies corresponding to the Elective Transmission Upgrade are completed (including receipt of approval under Section I.3.9 of the Tariff), a commercial operation date has been ascertained, and for which the certification has been accepted in accordance with Section III.12 of the Tariff. In the case where the Elective Transmission Upgrades are proposed in conjunction with the interconnection of a resource, these Elective Transmission Upgrades shall be considered at the same time as the proposed resource is considered in the Needs Assessment provided that the studies corresponding to the Elective Transmission Upgrade are completed (including receipt of approval under Section I.3.9 of the Tariff), a commercial operation date has been ascertained, and for which the certification has been accepted in accordance with Section III.12 of the Tariff.

**(g) Needs Assessment Support**

For the development of the Needs Assessments, the ISO will coordinate with the PTOs and the Planning Advisory Committee to support the ISO's performance of Needs Assessments. To facilitate this support, the ISO will post on its website the models, files, cases, contingencies, assumptions and other information used to perform Needs Assessments. The ISO may establish requirements that any PTO or member of the Planning Advisory Committee must satisfy in order to access certain information used to perform Needs Assessments, due to ISO New England Information Policy and CEII constraints. The ISO may ask PTOs or Planning Advisory Committee members with special expertise to provide technical support or perform studies required to assess one or more potential needs that will be considered in the Needs Assessments process. These entities will provide, and the ISO will post on its website, the models, files, cases, contingencies, assumptions and other information used by those entities to perform studies. The ISO will post the draft results of any such Needs Assessment studies on its website. The ISO will convene meetings open to any representative of an entity that is a member of the Planning Advisory Committee to facilitate input on draft Needs Assessments studies and the inputs to those studies prior to the ISO's completion of a draft Needs Assessment report to be reviewed by the entire Planning Advisory Committee pursuant to Section 4.1(i) of this Attachment. All



provisions of this subsection (g) relating to the provision and sharing of information shall be subject to the ISO-NE Information Policy.

**(h) Input from the Planning Advisory Committee**

Meetings of the Planning Advisory Committee shall be convened to identify additional considerations relating to a Needs Assessment that were not identified in support of initiating the assessment, and to provide input on the Needs Assessment's scope, assumptions and procedures, consistent with the responsibilities of the Planning Advisory Committee as set forth in Section 2.2 of this Attachment.

**(i) Publication of Needs Assessment and Response Thereto**

The ISO shall report the results of Needs Assessments to the Planning Advisory Committee, subject to CEII constraints. Needs Assessments containing CEII will be posted on the ISO's password-protected website consistent with Section 2.4(d) of this Attachment. Needs Assessments will identify high-level functional requirements and characteristics for regulated transmission solutions and market responses that can meet the needs described in the assessment. Where the ISO forecasts that a solution is needed to solve reliability criteria violations in three years or less from the completion of a Needs Assessment (unless the solution to the Needs Assessment will likely be a Market Efficiency Transmission Upgrade), and the requirements of Section 4.1(j) of this Attachment have been met or where there is only one Phase One Proposal submitted in response to a request for proposal issued under Sections 4.3(a) of this Attachment or only one proposed solution that is selected to move on as a Phase Two Solution, the ISO will evaluate the adequacy of proposed regulated solutions by performing Solutions Studies, as described in Section 4.2 of this Attachment. Where the solution to a Needs Assessment will likely be a Market Efficiency Transmission Upgrade, or where the forecast year of need for a solution that is likely to be a Reliability Transmission Upgrade is more than three years from the completion of a Needs Assessment, the ISO will conduct a solution process based on a two-stage competitive solution process, as described in Section 4.3 of this Attachment.

**(j) Requirements for Use of Solutions Studies Rather than Competitive Solution Process for Projects Based on Year of Need**

The following requirements must be met in order for the ISO to use Solutions Studies in the circumstances described in Section 4.1(i) based on the solution's year of need:

- (i) The ISO shall separately identify and post on its website an explanation of the reliability criteria violations and system conditions that the region has a time-sensitive need to solve within three years of the completion of the relevant Needs Assessment. The explanation shall be in sufficient detail to allow stakeholders to understand the need and why it is time-sensitive.
- (ii) In deciding whether to utilize Solutions Studies, such that the regulated transmission solution will be developed through a process led by the ISO and built by the PTO(s), the ISO shall:
  - (A) Provide to the Planning Advisory Committee and post on its website a full and supported written description explaining the decision to designate a PTO as the entity responsible for construction and ownership of the reliability project, including an explanation of other transmission or non-transmission options that the region considered but concluded would not sufficiently address the immediate reliability need, and the circumstances that generated the reliability need and an explanation of why that reliability need was not identified earlier.
  - (B) Provide a 15-day period during which comments from stakeholders on the posted description may be sent to the ISO, which comments will be posted on the website, as well.
- (iii) The ISO shall maintain and post on its website a list of prior year designations of all projects in the limited category of transmission projects for which the PTO(s) was designated as the entity responsible for construction and ownership of the project following the performance of Solutions Studies. The list must include the project's need-by date and the date the PTO(s) actually energized the project, i.e., placed the project into service. The ISO shall file such list with the Commission as an informational filing in January of each calendar year covering the designations of the prior calendar year, when applicable.

#### **4.2 Evaluation of Regulated Transmission Solutions in Solutions Studies, Where Competitive Solution Process of Section 4.3 Is Not Applicable**

The procedures described in this Section 4.2 shall be utilized for the evaluation of regulated transmission solutions for reliability and market efficiency needs where the requirements of Sections 4.1(i) and/or (j) of this Attachment are satisfied. Otherwise, the procedures of Section 4.3 shall be utilized for that purpose.

##### **(a) Evaluation and Development of Regulated Transmission Solutions in Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades**

In the case of Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades, the ISO, in coordination with the proponents of regulated transmission solutions and other interested or affected stakeholders, shall conduct or participate in studies (“Solutions Studies”) to evaluate whether proposed regulated transmission solutions meet the PTF system needs identified in Needs Assessments. The ISO, in coordination with affected stakeholders shall also identify regulated transmission projects for addressing the needs identified in Needs Assessments.

The ISO may form ISO-led targeted study groups to conduct Solutions Studies. Such study groups will include representatives of the proponents of regulated transmission solutions and other interested or affected stakeholders. Through this process, the ISO may identify the solutions for the region that offer the best combination of electrical performance, cost, future system expandability, and feasibility to meet a need identified in a Needs Assessment in the required time frame. These solutions may differ from a transmission solution proposed by a transmission owner.

Proponents of regulated transmission proposals in response to Needs Assessments shall also identify any LSP plans that require coordination with their regulated transmission proposals addressing the PTF system needs.

##### **(b) Notice of Initiation of a Solutions Study**

The ISO shall provide notice of the initiation and scope of a Solutions Study to the Planning Advisory Committee.

**(c) Classification of Regulated Transmission Solutions as Market Efficiency  
Transmission Upgrades or Reliability Transmission Upgrades**

As described in Section 3.1 and 3.6(a) of this Attachment, proposed regulated transmission solutions determined by the ISO, in consultation with the Planning Advisory Committee, to address needs identified in Needs Assessments shall be classified as a Reliability Transmission Upgrade and/or a Market Efficiency Transmission Upgrade pursuant to the standards set forth in Attachment N of this OATT.

**(d) Evaluation Factors Used for Identification of the Preferred Solution**

Factors to be considered during the evaluation process for identification of the preferred solution may include, but are not limited to, the following which are listed in no particular order:

- Installed cost;
- Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
- System performance;
- Cost cap or cost containment provisions;
- In-service date of the project or portion(s) thereof;
- Project constructability;
- Generation and transmission facility outages required during construction;
- Extreme contingency performance;
- Operational impacts;
- Incremental costs for potential resource retirements;
- Interface impacts;
- Future expandability;
- Consistency with Good Utility Practice;
- Potential siting/permitting issues or delays;
- Loss savings;
- Replacement of aging infrastructure;
- Environmental impact;
- Design standards; and

- Impact on NPCC Bulk Power System classification.

**(e) Identification of the Preferred Solution and Inclusion of Results of Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades in the RSP**

The results of Solutions Studies related to Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades will be reported to the Planning Advisory Committee. After receiving feedback from the Planning Advisory Committee, the ISO will identify the preferred solution. The ISO will inform the appropriate Transmission Owners in writing regarding the identification of the preferred solution.

Once identified, the preferred solution, as appropriate, will be reflected (with an overview of why the solution is preferred) in the RSP and/or its Project List, as it is updated from time to time in accordance with this Attachment. Where external impacts of regional projects are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP. Costs associated with such impacts will be addressed as set forth in Schedule 15.

**(f) Cancellation of a Solutions Study**

The ISO may cancel a Solutions Study at any time. Such cancellation may be due to new or different assumptions which may change or eliminate the identified needs. Any costs associated with Solutions Study development shall be recovered pursuant to Section 3.6(c) of this Attachment.

**4.3 Competitive Solution Process for Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades**

**(a) Initiating the Competitive Solution Process**

The ISO will publicly issue a request for proposal for which, pursuant to Section 4.1(i) of this Attachment, a competitive solution process will be utilized. The request for proposal will indicate that a Qualified Transmission Project Sponsor may submit an individual or joint Phase One Proposal(s) offering a solution that addresses the identified needs or address a subset of those needs. In the case where a joint Phase One Proposal is submitted, all parties must be Qualified Transmission Project Sponsors. A Qualified Transmission Project Sponsor may propose a

comprehensive solution to address the identified needs, or a subset thereof, that includes an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases, the Qualified Transmission Project Sponsor's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available to the Qualified Transmission Project Sponsor as part of its response to the request for proposal. The Qualified Transmission Project Sponsor is not required to procure agreements with the PTO for implementation of such upgrades as the PTO is required to implement the upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process.

A PTO or PTOs identified by the ISO as the Backstop Transmission Solution provider(s) shall submit an individual or joint Phase One Proposal (if more than one PTO is identified) as a Backstop Transmission Solution to comprehensively address all of the needs identified in the request for proposal that would be solved by a project located within or connected to its/their existing electric system, and which it/they would therefore have an obligation to build under Schedule 3.09(a) of the TOA. Such PTOs may recover the costs of preparing the Backstop Transmission Solution in accordance with the mechanisms reflected in the OATT and the terms of the TOA.

A member of the Planning Advisory Committee that is not a Qualified Transmission Project Sponsor but would like the ISO to consider a Phase One Proposal reflecting its concept for a project in response to a request for proposal (that is, a project that is "unsponsored") must, before the deadline for the submission of Phase One Proposals, identify a Qualified Transmission Project Sponsor willing to submit a corresponding Phase One Proposal and Phase Two Solution (and to develop and construct the project, if selected in the competitive solution process) in order for the unsponsored project to be submitted in response to an ISO solicitation in Phase One. Upon request by the pertinent Planning Advisory Committee member for assistance in identifying a sponsor, the ISO shall post on its website and distribute to the Planning Advisory Committee a notice that solicits expressions of interest by Qualified Transmission Project Sponsors for sponsorship of the member's conceptual project. All expressions of interest shall include a detailed explanation of why the Qualified Transmission Project Sponsor is best qualified to

construct, own and operate the unsponsored project. If only one Qualified Transmission Project Sponsor expresses interest, the ISO shall designate it as the Qualified Transmission Project Sponsor. If more than one Qualified Transmission Project Sponsor expresses interest, the Planning Advisory Committee member shall select the Qualified Transmission Project Sponsor. In either case, the designated Qualified Transmission Project Sponsor shall thereafter comply with the requirements of this Attachment K and the ISO Tariff with respect to the project. If no Qualified Transmission Project Sponsor expresses interest, the unsponsored project may not be submitted as a Phase One Proposal.

**(b) Use and Control of Right of Way**

Neither the submission of a project by a Qualified Transmission Project Sponsor nor the selection by the ISO of a project submitted by a Qualified Transmission Project Sponsor for inclusion in the RSP Project List shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights, that granted the right-of-way. Nothing in the processes described in this Attachment K requires a PTO to relinquish any of its rights-of-way in order to permit a Qualified Transmission Project Sponsor to develop, construct or own a project.

**(c) Information Required for Phase One Proposals; Study Deposit; Timing**

**Phase One Proposals shall provide the following information:**

- (i) a detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed route for the solution and technical details of the project, such as interconnection into the existing transmission system;
- (ii) a detailed explanation of the identified needs that are addressed, how the proposed solution addresses those identified needs, a description of those needs which have not been addressed, and a description of the impact of the Phase One Proposal on those needs which have not been addressed;

- (iii) the proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution;
- (iv) right, title, and interest in rights of way, substations, and other property or facilities, if any, that would contribute to the proposed solution or the means and timeframe by which such would be obtained; and
- (v) the estimated installed costs of the proposed solution, including a high-level itemization of the components of the cost estimate and any cost containment or cost cap measures.

With each proposal, the submitting Qualified Transmission Project Sponsor must include payment of a \$100,000 study deposit per submitted Phase One Proposal to support the cost of Phase One Proposal and Phase Two Solution study work by the ISO. The study deposit of \$100,000 shall be applied towards the costs incurred by the ISO associated with the study of the Phase One Proposal and Phase Two Solution.

Phase One Proposals must be submitted by the deadline specified in the public posting by the ISO of the request for proposal described in Section 4.3(a) of this Attachment, which shall not be less than 60 days from the posting date of the request for proposal. The ISO may reject submittals which are insufficient or not adequately supported.

**(d) LSP Coordination**

Qualified Transmission Project Sponsors of Phase One Proposals shall also identify any LSP plans that require coordination with their Phase One Proposals.

**(e) Review of Phase One Proposals by ISO**

If any identified need is only solved by the Backstop Transmission Solution, the ISO shall proceed under Section 4.2 of this Attachment, rather than pursuant to the procedures set forth in the remainder of this Section 4.3.



If all of the identified needs are solved by more than one Phase One Proposal, the ISO shall perform a review of each proposal to determine whether the proposed solution:

- (i) provides sufficient data and that the data is of sufficient quality to satisfy Section 4.3(c) of this Attachment;
- (ii) satisfies one or more of the needs as identified in Section 4.3(c)(ii);
- (iii) is technically practicable and indicates possession of, or an approach to acquiring, the necessary rights of way, property and facilities that will make the proposal reasonably feasible in the required timeframe; and
- (iv) is eligible to be constructed only by an existing PTO in accordance with Schedule 3.09(a) of the TOA because the proposed solution is an upgrade to existing PTO facilities, or because the costs of the proposed solution are not eligible for regional cost allocation under the OATT and will be allocated only to the local customers of a PTO.

**(f) Proposal Deficiencies; Further Information**

If the ISO identifies any minor deficiencies in meeting the requirements of Section 4.3(e) in the information provided in connection with a proposed Phase One Proposal, the ISO will notify the submitting Phase One Proposal Qualified Transmission Project Sponsor and provide an opportunity for the sponsor to cure the deficiencies within the timeframe specified by the ISO. Upon request, Qualified Transmission Project Sponsors of Phase One Proposals shall provide the ISO with additional information reasonably necessary for the ISO's evaluation of the proposed Phase One Proposals. This identification and notification will occur prior to the publication by the ISO of any Phase One Proposals. In providing information under this subsection (f), or in Phase Two Solutions, the Qualified Transmission Project Sponsor may not modify its project materially or submit a new project, but instead may clarify its Phase One Proposal. Phase Two Solutions reflecting a material modification to a Phase One Proposal or representing a new project will be rejected.

**(g) Listing of Qualifying Phase One Proposals or Groups of Phase One Proposals**

The ISO will provide the Planning Advisory Committee with, and post on the ISO's website, a listing of Phase One Proposals that meet the criteria of Section 4.3(e). The listing will contain Phase One Proposals, either individually or as a group, that solve all of the identified needs. A meeting of the Planning Advisory Committee will be held thereafter in order to solicit stakeholder input on the listing, and the listed proposals. The ISO with input from the Planning Advisory Committee may exclude Phase One Proposals, from the list, and from consideration in Phase Two Solutions, based on a determination that the Phase One Proposal is not competitive with other Phase One Proposals, that have been submitted in terms of cost, electrical performance, future system expandability, or feasibility. Information on Phase One Proposals containing CEII will be posted on the ISO's protected website consistent with Section 2.4(d) of this Attachment. The ISO may amend its listing based on stakeholder input. The ISO shall post on its website an explanation of why it has determined to exclude a Phase One Proposal from consideration in the Phase Two Solution process.

**(h) Information Required for Phase Two Solutions; Identification and Reporting of Preliminary Preferred Phase Two Solution**

Qualified Transmission Project Sponsors of Phase One Proposals reflected on the final listing developed pursuant to Section 4.3(g) of this Attachment shall provide the following information in their proposed Phase Two Solutions:

- (i) updates of the information provided in Phase One Proposals, or a certification that the information remains current and correct;
- (ii) list of required major Federal, State and local permits;
- (iii) description of construction sequencing, a conceptual plan for the anticipated transmission and generation outages necessary to construct the Phase Two Solution and their respective durations, and possible constraints;
- (iv) project schedule, with additional detail compared with Phase One Proposals, as specified by the ISO;

- (v) detailed cost component itemization and life-cycle cost including any clarifications to cost containment or cost cap measures that were not included as part of the Phase One Proposal;
- (vi) description of the financing being used;
- (vii) design and equipment standards to be used;
- (viii) description of the authority the Qualified Transmission Project Sponsor(s) has to acquire necessary rights of way;
- (ix) experience of the Qualified Transmission Project Sponsor(s) in acquiring rights of way;
- (x) status of acquisition of right, title, and interest in rights of way, substations, and other property or facilities, if any, that are necessary for the proposed Phase Two Solution;
- (xi) detailed explanation of project feasibility and potential constraints and challenges;
- (xii) description of the means by which the Qualified Transmission Project Sponsor(s) proposes to satisfy legal or regulatory requirements for siting, constructing, owning and operating transmission projects; and
- (xiii) detailed explanation of potential future expandability.

Phase Two Solutions must be submitted to the ISO by the deadline specified in the posting of the final listing (following stakeholder input) of Phase One Proposals described in Section 4.3(g). The deadline for submittal of Phase Two Solutions shall not be less than 60 days from the posting date of the final listing. The ISO may reject Phase Two Solution submittals which are insufficient or not adequately supported.

The ISO will identify the Phase Two Solution, individually or as a group, that offers the best combination of electrical performance, cost, future system expandability and feasibility to

comprehensively address all of the needs in the required timeframe as the preliminary preferred Phase Two Solution in response to each request for proposal. The ISO will report the preliminary preferred Phase Two Solution, together with explanatory materials, to the Planning Advisory Committee and seek stakeholder input on the preliminary preferred Phase Two Solution.

The ISO will consider several factors during the evaluation process for identification of the preliminarily preferred Phase Two Solution. These factors may include, but are not limited to, the following which are listed in no particular order:

- Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
- System performance;
- Cost cap or cost containment provisions;
- In-service date of the project or portion(s) thereof;
- Project constructability;
- Generation and transmission facility outages required during construction;
- Extreme contingency performance;
- Operational impacts;
- Incremental costs for potential resource retirements;
- Interface impacts;
- Future expandability;
- Consistency with Good Utility Practice;
- Potential siting/permitting issues or delays;
- Loss savings;
- Replacement of aging infrastructure;
- Environmental impact;
- Design standards;
- Impact on NPCC Bulk Power System classification; and
- Qualified Transmission Project Sponsor(s) capabilities.

**(i) Reimbursement of Phase Two Solution Costs; Collection and Refund of ISO Study Costs**

Qualified Transmission Project Sponsors whose Phase One Proposals are listed pursuant to Section 4.3(g) for review as Phase Two Solutions shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff (and, as applicable, the TOA and NTDOA), all prudently incurred costs associated with developing a Phase Two Solution. PTOs shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff, all prudently incurred study costs and costs associated with developing any upgrades or modifications to such PTOs' existing facilities necessary to facilitate the development of a listed Phase One Proposal proposed by any other Qualified Transmission Project Sponsor.

Any difference between a Qualified Transmission Project Sponsor's study deposit and the actual cost of the Phase One Proposal and Phase Two Solution studies shall be paid by or refunded to the Qualified Transmission Project Sponsor, as appropriate, with interest calculated in accordance with Section 35.19a(a)(2) of the FERC regulations. Any refund payment shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any invoice to collect funds in addition to the deposit shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any disputes arising from the study process shall be addressed under the dispute resolution process specified in Section I.6 of the ISO Tariff.

**(j) Selection of the Preferred Phase Two Solution**

Following receipt of stakeholder input, the ISO will identify the preferred Phase Two Solution, individually or as a group, (with an overview of why the solution is preferred) by a posting on its website. The ISO's identification will select the project that offers the best combination of electrical performance, cost, future system expandability and feasibility to meet the need in the required timeframe. The ISO will also notify the Qualified Transmission Project Sponsor(s) that proposed the preferred Phase Two Solution that its project has been selected for development. The preferred Phase Two Solution may include an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases the ISO will notify the PTO that have upgrades required by the preferred Phase Two Solution to proceed in accordance with Schedule 3.09(a) of the Transmission Operating Agreement. Once the ISO has identified the preferred Phase Two Solution, any remaining Phase Two Solutions, along with the Backstop Transmission Solution, must stop all development. The ISO will include the project as a Reliability Transmission

Upgrade or Market Efficiency Transmission Upgrade, as appropriate, in the RSP and/or its Project List, as it is updated from time to time in accordance with this Attachment. Where external impacts of regional projects are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP. Costs associated with such impacts will be addressed as set forth in Schedule 15.

**(k) Execution of Selected Qualified Transmission Project Sponsor Agreement**

Within 30 days of receiving notification pursuant to Section 4.3(j) of this Attachment, the Qualified Transmission Project Sponsor shall submit to the ISO its acceptance of responsibility to proceed with the preferred Phase Two Solution by execution of a Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Within 30 days of receiving notification pursuant to Section 4.3(j) of this Attachment, each Qualified Transmission Project Sponsor that is part of the joint proposal shall submit to the ISO its acceptance of responsibility to proceed with the preferred Phase Two Solution by execution of a Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Any cost cap or cost containment provisions shall be included in each Selected Qualified Transmission Project Sponsor Agreement.

**(l) Failure to Proceed**

If the ISO finds, after consultation with a PTO Qualified Transmission Project Sponsor(s), that one or more of the Qualified Transmission Project Sponsors is failing to pursue approvals or construction in a reasonably diligent fashion, the ISO will notify all Qualified Transmission Project Sponsors that one or more of the Qualified Transmission Project Sponsors is failing to pursue approvals or construction in a reasonably diligent fashion. The Qualified Transmission Project Sponsor(s) that is failing to pursue approvals or construction in a reasonably diligent fashion will have 60 days from the ISO's notification to reassign a portion or all of the preferred Phase Two Solution to another Qualified Transmission Project Sponsor in accordance with Section 8 of the Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). In the event that such reassignment does not occur within 60 days, the ISO shall require the applicable PTO(s) to execute the Selected Qualified Transmission Project Sponsor Agreement and implement the Backstop Transmission Solution pursuant to Schedule 3.09(a) of the Transmission Operating Agreement. In such cases the ISO shall prepare a report explaining

why it has reassigned the project. If the Qualified Transmission Project Sponsor that is failing or unable to proceed is a PTO, the report shall be consistent with the provisions of Section 1.1(e) of Schedule 3.09(a) of the Transmission Operating Agreement, including the ISO's proposed course of action. If prepared with respect to a Qualified Transmission Project Sponsor that is not a PTO, the report shall include a report from that sponsor. The ISO shall file its report (whether with respect to a PTO or non-PTO Qualified Transmission Project Sponsor) with the Commission.

**(m) Cancellation of a Request for Proposal**

The ISO may cancel a request for proposal at any time. Such cancellation may be due to new or different assumptions which may change or eliminate the identified needs. Any costs associated with solution development shall be recovered pursuant to Sections 3.6(c), 4.3(a) and 4.3(i) of this Attachment.

**4A. Public Policy Transmission Studies; Public Policy Transmission Upgrades**

**4A.1 NESCOE Requests for Public Policy Transmission Studies**

No less often than every three years, by January 15 of that year, the ISO will post a notice indicating that members of the Planning Advisory Committee may, no later than 45 days after the posting of the notice: (i) provide NESCOE, via the process described below, with input regarding state and federal Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and regarding particular transmission needs driven by those Public Policy Requirements, and (ii) provide the ISO with input regarding local (e.g., municipal and county) Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and regarding particular transmission needs driven by those Public Policy Requirements. A meeting of the Planning Advisory Committee may be held for this purpose. Members of the Planning Advisory Committee shall direct all such input related to state, federal, and local Public Policy Requirements that drive transmission needs to the ISO and the ISO will post such input on the ISO's website. By no later than May 1 of that year, NESCOE may submit to the ISO in writing a request for a new Public Policy Transmission Study, or an update of a previously conducted study. The request will identify the Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and may identify particular NESCOE-identified public policy-related transmission needs as well. Along with any such request, NESCOE will provide the ISO with a written explanation

of which transmission needs driven by state or federal Public Policy Requirements the ISO will evaluate for potential solutions in the regional planning process, including why other suggested transmission needs will not be evaluated. The ISO will post the NESCOE request and explanation on the ISO's website. If NESCOE does not provide that listing of identified transmission needs (which may consist of a NESCOE statement of its determination that no transmission needs are driven by state or federal Public Policy Requirements identified during the stakeholder process) and that explanation (which may consist of a NESCOE explanation of why no transmission needs are driven by state or federal Public Policy Requirements identified during the stakeholder process), the ISO will note on its website that a NESCOE listing and explanation have not been provided. In that circumstance, the ISO will determine subsequently (after opportunity for Planning Advisory Committee input), and post on its website an explanation of, which transmission needs driven by state or federal Public Policy Requirements the ISO will evaluate in the regional planning process, including why other suggested transmission needs will not be evaluated.

#### **4A.1.1 Study of Federal Public Policy Requirements Not Identified by NESCOE; Local Public Policy Requirements**

If a stakeholder believes that a federal Public Policy Requirement that may drive transmission needs relating to the New England Transmission System has not been appropriately addressed by NESCOE, it may file with the ISO, no later than 15 days after the posting of NESCOE's explanation as described in Section 4A.1 of this Attachment, a written request that explains the stakeholder's reasoning and that seeks reconsideration by the ISO of NESCOE's position regarding that requirement. The ISO will post the stakeholder's written request on the ISO's website. Where the ISO agrees with a stated stakeholder position, or on its own finding, the ISO may perform an evaluation under Sections 4A.2 through 4A.4 of this Attachment of a federal Public Policy Requirement not otherwise identified by NESCOE. The ISO will post on its website an explanation of those transmission needs driven by federal Public Policy Requirements not identified by NESCOE that will be evaluated for potential transmission solutions in the regional system planning process, and why other suggested transmission needs driven by federal Public Policy Requirements not identified by NESCOE will not be evaluated. In addition, the ISO will post on its website an explanation of those transmission needs driven by local Public Policy Requirements that will be evaluated for potential transmission solutions in the regional



system planning process, and why other suggested transmission needs driven by local Public Policy Requirements will not be evaluated.

#### **4A.2 Preparation for Conduct of Public Policy Transmission Studies; Stakeholder Input**

Upon receipt of the NESCOE request, or as the result of the ISO's consideration of a federal or local Public Policy Requirement pursuant to Section 4A.1.1, the ISO will prepare and post on its website a proposed scope for the Public Policy Transmission Study, and associated parameters and assumptions (including resource assumptions), and provide the foregoing to the Planning Advisory Committee by no later than September 1 of the request year. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit stakeholder input for consideration by the ISO on the study's scope, parameters and assumptions.

#### **4A.3 Public Policy Transmission Studies**

##### **(a) Conduct of Public Policy Transmission Studies; Stakeholder Input**

With input from Planning Advisory Committee and potentially impacted PTOs, the ISO will perform the initial phase of the Public Policy Transmission Study to develop a rough estimate of the costs and benefits of high-level concepts that could meet transmission needs driven by Public Policy Requirements. The study's results will be posted on the ISO's website, and a meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input on the results of the initial phase of the study, and the scope, parameters and assumptions (including resource assumptions) for any follow-on phase of the study. The ISO may – as a follow-on phase of the Public Policy Transmission Study – perform more detailed analysis and engineering work on the high-level concepts.

##### **(b) Treatment of Market Solutions in Public Policy Transmission Studies**

The ISO shall reflect proposed market responses in the Public Policy Transmission Study. Market responses may include, but are not limited to, resources (e.g., demand-side projects and distributed generation), Merchant Transmission Facilities and Elective Transmission Upgrades.

In performing Public Policy Transmission Studies, the ISO shall rely on certain resources to prevent the identification of transmission needs driven by Public Policy Requirements. Specifically, the ISO shall incorporate in the Public Policy Transmission Study information

regarding future resources, with the exception of imports across external tie lines, that have been proposed and (i) have cleared in a Forward Capacity Auction pursuant to Market Rule 1 of the ISO Tariff, (ii) have been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) have been forecast in the ISO's Forecast Report of Capacity, Energy, Loads and Transmission. The ISO shall also incorporate or update information regarding all existing resources, with the exception of imports across external tie lines, in Public Policy Transmission Studies. Imports across future or existing external tie lines will not be relied upon unless such imports (i) have a Capacity Supply Obligation corresponding to the year of study, (ii) have been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) may be represented by a minimum flow based on HQ Interconnection Capability Credits. The ISO will model out-of-service all submitted Retirement De-List Bids, submitted Permanent De-List Bids, and demand bids that have cleared in a substitution auction, and may model out-of-service rejected-for-reliability Static De-List Bids and rejected-for-reliability Dynamic De-List Bids from the most recent Forward Capacity Auction. With respect to having been selected in, and being contractually bound by a state-sponsored request for proposals, or having a financially binding obligation pursuant to a contract, demonstration of such contracts is accomplished through submittal for ISO review of an order or other similar authorization from the appropriate state regulatory agency, along with a copy of the contract, that together demonstrate the contractual requirements. These documents may be submitted by: the Project Sponsor; the state regulatory agency authorizing the contract; a transmission company that is a counterparty to the contract; or by a third-party organization representing the interests of the New England states regarding energy related issues, such as NESCOE. The ISO shall incorporate information regarding a proposed Merchant Transmission Facility or Elective Transmission Upgrade in a Public Policy Transmission Study at a time after the studies corresponding to the Merchant Transmission Facility or Elective Transmission Upgrade are completed (including receipt of approval under Section I.3.9 of the Tariff), and a commercial operation date has been ascertained, with the exception of Elective Transmission Upgrades that are proposed in conjunction with the interconnection of a resource, which shall be considered at the same time as the proposed resource is considered in the Public Policy Transmission Study.

#### **4A.4 Response to Public Policy Transmission Studies**

The results of the Public Policy Transmission Study will be provided to the Planning Advisory Committee and posted on the ISO's website, and a meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input for the ISO on those results, including any updates from the states on any methods by which they are satisfying their respective Public Policy Requirements included in the Public Policy Transmission Study. The ISO's costs of performing the Public Policy Transmission Study described in Section 4A.3 will be collected by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff. Any prudently incurred PTO costs for assistance requested by the ISO to support the Public Policy Transmission Study will be recovered by the applicable PTO(s) in accordance with Attachment F and Schedule 21 of the Tariff.

The ISO will evaluate the input from the Planning Advisory Committee and provide the results of the Public Policy Transmission Study to Qualified Transmission Project Sponsors for their use in preparing Stage One Proposals to develop, build and operate one or more projects consistent with the general design requirements identified by the ISO in the study.

#### **4A.5 Use and Control of Right of Way**

Neither the submission of a project by a Qualified Transmission Project Sponsor nor the selection by the ISO of a project submitted by a Qualified Transmission Project Sponsor for inclusion in the RSP Project List shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights, that granted the right-of-way. Nothing in the processes described in this Attachment K requires a PTO to relinquish any of its rights-of-way in order to permit a Qualified Transmission Project Sponsor to develop, construct or own a project.

#### **4A.6 Stage One Proposals**

##### **(a) Information Required for Stage One Proposals**

The ISO will publicly post on its website a request for proposal inviting, for each high-level general project concept identified by the ISO pursuant to Section 4A.3(a) above, Qualified Transmission Project Sponsors to submit (by the deadline specified in the request for proposal, which shall be not less than 60 days from the date of posting the request for proposal) an

individual or joint Stage One Proposal. In the case where a joint Stage One Proposal is submitted, all parties must be Qualified Transmission Project Sponsors. The following information must be provided as part of the Stage one Proposal:

- (i) a detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed route for the solution and technical details of the project, such as interconnection into the existing transmission system;
- (ii) a detailed explanation of how the proposed solution addresses the identified need;
- (iii) the proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution;
- (iv) right, title, and interest in rights of way, substations, and other property or facilities, if any, that would contribute to the proposed solution or the means and timeframe by which such would be obtained; and
- (v) the estimated installed costs of the proposed solution, including a high-level itemization of the components of the cost estimate, and any cost containment or cost cap measures.

A Qualified Transmission Project Sponsor may submit a proposed solution that includes an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases, the Qualified Transmission Project Sponsor's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available to the Qualified Transmission Project Sponsor as part of its response to the request for proposal. The Qualified Transmission Project Sponsor is not required to procure agreements with the PTO for implementation of such upgrades as the PTO is required to implement the upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process.

A member of the Planning Advisory Committee that is not a Qualified Transmission Project Sponsor but would like the ISO to consider a Stage One Proposal reflecting its concept for a project in response to a request for proposal (that is, a project that is "unsponsored") must identify a Qualified Transmission Project Sponsor willing to submit a corresponding Stage One Proposal

and Stage Two Solution (and to develop and construct the project, if selected in the competitive solution process) in order for the unsponsored project to be submitted in response to an ISO solicitation in Stage One Proposal. Upon request of the pertinent Planning Advisory Committee member for assistance in identifying a sponsor, the ISO shall post on its website and distribute to the Planning Advisory Committee a notice that solicits expressions of interest by Qualified Transmission Project Sponsors for sponsorship of the member's conceptual project. All expressions of interest shall include a detailed explanation of why the Qualified Transmission Project Sponsor is best qualified to construct, own and operate the unsponsored project. If only one Qualified Transmission Project Sponsor expresses interest, the ISO shall designate it as the Qualified Transmission Project Sponsor. If more than one Qualified Transmission Project Sponsor expresses interest, the Planning Advisory Committee member shall select the Qualified Transmission Project Sponsor. In either case, the designated Qualified Transmission Project Sponsor shall thereafter comply with the requirements of this Attachment K and the ISO Tariff with respect to the project. If no Qualified Transmission Project Sponsor expresses interest, the unsponsored project may not be submitted as a Stage One Proposal.

With each proposal, the submitting Qualified Transmission Project Sponsor must include payment of a \$100,000 study deposit per submitted project to support the cost of Stage One Proposal and Stage Two Solution study work by the ISO. The study deposit of \$100,000 shall be applied towards the costs incurred by the ISO associated with the study of the Stage One Proposal and Stage Two Solution.

**(b) LSP Coordination**

Qualified Transmission Project Sponsors of Stage One Proposals shall also identify any LSP plans that require coordination with their Stage One Proposals.

**(c) Review of Stage One Proposals by ISO**

Upon receipt of Stage One Proposals, the ISO shall perform a review of each proposal to determine whether the proposed solution:

- (i) provides sufficient data and that the data is of sufficient quality to satisfy Section 4A.6(a);

- (ii) satisfies the needs driven by Public Policy Requirements identified in the request for proposal, as reflected in the Public Policy Transmission Study;
- (iii) is technically practicable and indicates possession of, or an approach to acquiring, the necessary rights of way, property and facilities that will make the proposal reasonably feasible in the required timeframe; and;
- (iv) is eligible to be constructed only by an existing PTO in accordance with Schedule 3.09(a) of the TOA because the proposed solution is an upgrade to existing PTO facilities or because the costs of the proposed solution are not eligible for regional cost allocation under the OATT and will be allocated only to the local customers of a PTO.

**(d) Proposal Deficiencies; Further Information**

If the ISO identifies any deficiencies (compared with the requirements of Section 4A.6(a)) in the information provided in connection with a proposed Stage One Proposal, the ISO will notify the Stage One Proposal Qualified Transmission Project Sponsor and provide an opportunity for the Qualified Transmission Project Sponsor to cure the deficiencies within the timeframe specified by the ISO. Upon request, Qualified Transmission Project Sponsors of Stage One Proposals shall provide the ISO with additional information reasonably necessary for the ISO's evaluation of the proposed solutions. This identification and notification will occur prior to the publication by the ISO of any Stage One Proposals. In providing information under this subsection (d), or in Stage Two Solutions, the Qualified Transmission Project Sponsor may not modify its project materially or submit a new project, but instead may clarify its project. Stage Two Solutions reflecting a material modification to a Stage One Proposal or representing a new project will be rejected.

**(e) List of Qualifying Stage One Proposals**

The ISO will provide the Planning Advisory Committee with, and post on the ISO's website, a list of Stage One Proposals that meet the criteria of Section 4A.6(c). A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input for the ISO on that list. The ISO shall also indicate whether any of the Stage One Proposals may also satisfy identified reliability needs of the system. The ISO with input from the Planning Advisory Committee may exclude Stage One Proposals from the list, and from consideration in Stage Two Solutions, based on a determination that the Stage One Proposal is not competitive with other Stage One Proposals that have been submitted in terms of cost, electrical performance, future

system expandability, or feasibility. Information on Stage One Proposals containing CEII will be posted on the ISO's protected website consistent with Section 2.4(d) of this Attachment. The ISO may amend its listing based on stakeholder input.

#### **4A.7 Reimbursement of Stage One Proposal and Stage Two Solution Costs; Collection and Refund of ISO Study Costs**

Qualified Transmission Project Sponsors that are requested by NESCOE in writing or by one or more states' governors or regulatory authorities directly to submit a Stage One Proposal shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff and the TOA, their prudently incurred costs from the Regional Network Load of the states identified by NESCOE in the written communication as having made the request or from the Regional Network Load of the states that made the request directly. Stage One Proposal costs shall otherwise not be subject to recovery under the ISO Tariff.

Qualified Transmission Project Sponsors whose projects are listed by the ISO pursuant to Section 4A.6(e) shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff and, as applicable, the TOA and NTDOA, all prudently incurred costs associated with developing a Stage Two Solution. PTOs shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff, all prudently incurred study costs and costs associated with developing any upgrades or modifications to such PTOs' existing facilities necessary to facilitate the development of a listed Stage Two Solution proposed by any other Qualified Transmission Project Sponsor.

Any difference between a Qualified Transmission Project Sponsor's study deposit and the actual cost of the Stage One Proposal and Stage Two Solutions studies shall be paid by or refunded to the Qualified Transmission Project Sponsor, as appropriate, with interest calculated in accordance with Section 35.19a(a)(2) of the FERC regulations. Any refund payment shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any invoice to collect funds in addition to the deposit shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any disputes arising from the study process shall be addressed under the dispute resolution process specified in Section I.6 of the Tariff.

**4A.8 Information Required for Stage Two Solutions; Identification and Reporting of Preliminary Preferred Stage Two Solution**

Qualified Transmission Project Sponsors of Stage One Proposals listed pursuant to Section 4A.6(e) of this Attachment shall provide the following information in their proposed Stage Two Solutions:

- (i) updates of the information provided in Stage One Proposals, or a certification that the information remains current and correct;
- (ii) list of required major Federal, State and local permits;
- (iii) description of construction sequencing, a conceptual plan for the anticipated transmission and generation outages necessary to construct the Stage Two Solution and their respective durations, and possible constraints;
- (iv) project schedule, with additional detail compared with Stage One Proposals, as specified by the ISO;
- (v) detailed cost component itemization and life-cycle cost including any clarifications to cost containment or cost cap measures that were not included as part of the Stage One Proposal;
- (vi) description of the financing being used;
- (vii) design and equipment standards to be used;
- (viii) description of the authority the Qualified Transmission Project Sponsor(s) has to acquire necessary rights of way;
- (ix) experience of the Qualified Transmission Project Sponsor(s) in acquiring rights of way;



- (x) status of acquisition of right, title, and interest in rights of way, substations, and other property or facilities, if any, that are necessary for the proposed Stage Two Solution;
- (xi) detailed explanation of project feasibility and potential constraints and challenges;
- (xii) description of the means by which the Qualified Transmission Project Sponsor(s) proposes to satisfy legal or regulatory requirements for siting, constructing, owning and operating transmission projects; and
- (xiii) detailed explanation of potential future expandability.

Stage Two Solutions must be submitted to the ISO by the deadline specified in the posting of the final listing (following stakeholder input) of Stage One Proposals described in Section 4A.6(e). The deadline for submittal of Stage Two Solutions shall not be less than 60 days from the posting date of the final listing. The ISO may reject Stage Two Solution submittals which are insufficient or not adequately supported.

The ISO will consider several factors during the evaluation process for identification of the preliminarily preferred Stage Two Solution. These factors may include, but are not limited to, the following which are listed in no particular order:

- Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
- System performance;
- Cost cap or cost containment provisions;
- In-service date of the project or portion(s) thereof;
- Project constructability;
- Generation and transmission facility outages required during construction;
- Extreme contingency performance;
- Operational impacts;
- Incremental costs for potential resource retirements;
- Interface impacts;
- Future expandability;

- Consistency with Good Utility Practice;
- Potential siting/permitting issues or delays;
- Loss savings;
- Replacement of aging infrastructure;
- Environmental impact;
- Design standards;
- Impact on NPCC Bulk Power System classification; and
- Qualified Transmission Project Sponsor(s) capabilities

The ISO will report the preliminary preferred Stage Two Solution(s), along with its views as to whether the preliminary preferred solution(s) also satisfies identified reliability needs of the system, to the Planning Advisory Committee and seek stakeholder input on the preliminary preferred Stage Two Solution(s).

#### **4A.9 Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List; Milestone Schedules; Removal from RSP Project List**

##### **(a) Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List**

Following receipt of stakeholder input, the ISO will identify the preferred Stage Two Solution (with an overview of why the solution is preferred) by a posting on its website. The ISO's identification will select the Stage Two Solution that best addresses the identified Public Policy Requirement while utilizing the best combination of electrical performance, cost, future system expandability and feasibility to meet the need in the required timeframe. The ISO will also notify the Qualified Transmission Project Sponsor that proposed the preferred Stage Two Solution that its project has been selected for development, and include the project as a Public Policy Transmission Upgrade in the Regional System Plan and RSP Project List, as it is updated from time to time in accordance with this Attachment. The preferred Stage Two Solution may include an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases the ISO will notify the PTO that have upgrades required by the

preferred Stage Two Solution to proceed in accordance with Schedule 3.09(a) of the Transmission Operating Agreement. Once the ISO has identified the preferred Stage Two Solution, any remaining Stage Two Solutions must stop all development. Where external impacts of regional Public Policy Transmission Upgrades are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP. Costs associated with such impacts will be addressed as set forth in Schedule 15.

**(b) Execution of Selected Qualified Transmission Project Sponsor Agreement**

Within 30 days of its receiving notification pursuant to Section 4A.9(a) of this Attachment, the Qualified Transmission Project Sponsor shall submit to the ISO its acceptance of responsibility to proceed with the preferred Stage Two Solution by execution of the Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Within 30 days of receiving notification pursuant to Section 4A.9(a) of this Attachment, each Qualified Transmission Project Sponsor that is part of the joint proposal shall submit to the ISO its acceptance of responsibility to proceed with the preferred Stage Two Solution by execution of a Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Any cost cap or cost containment provisions shall be included each Selected Qualified Transmission Project Sponsor Agreement.

**(c) Failure to Proceed**

If the ISO finds, after consultation with a Qualified Transmission Project Sponsor, that the sponsor is failing to pursue approvals or construction in a reasonably diligent fashion, or that one or more of the Qualified Transmission Project Sponsors is unable to proceed with the project due to forces beyond its reasonable control, the ISO shall, after consultation with the Planning Advisory Committee, prepare a report, including a proposed course of action. If the Qualified Transmission Project Sponsor that is failing or unable to proceed is a PTO, the ISO shall, after consultation with the Planning Advisory Committee, prepare a report consistent with the provisions of Section 1.1(e) of Schedule 3.09(a) of the Transmission Operating Agreement, including the ISO's proposed course of action. The proposed course of action may include, for example, a consideration and selection of another Stage Two Proposal relating to the pertinent Public

Policy Requirement, or the re-solicitation of Stage One Proposals to meet the pertinent Public Policy Requirement. If prepared with respect to a Qualified Transmission Project Sponsor that is not a PTO, the report shall include a report from that sponsor. The ISO shall file its report (whether with respect to a PTO or a non-PTO Qualified Transmission Project Sponsor) with the Commission.

#### **4A.10 Cancellation of a Request for Proposal**

The ISO may cancel a request for proposal at any time. Such cancellation may be due to new or different assumptions which may change or eliminate the identified needs. Any costs associated with solutions development shall be recovered pursuant to Sections 3.6(c) and 4A.7 of this Attachment.

#### **4A.11 Local Public Policy Transmission Upgrades**

The costs of Local Public Policy Transmission Upgrade(s) that are required in connection with the construction of a Public Policy Transmission Upgrade approved for inclusion in the Regional System Plan in accordance with Section 4A.9 shall be allocated in accordance with Schedule 21 of the ISO OATT.

### **4B. Qualified Transmission Project Sponsors**

#### **4B.1 Evaluation of Applications**

The ISO will evaluate applications submitted by an entity that seeks to qualify as a sponsor of a proposed Reliability Transmission Upgrade, Market Efficiency Transmission Upgrade or Public Policy Transmission Upgrade.

#### **4B.2 Information To Be Submitted**

The application to be submitted to the ISO by an entity desiring to be a Qualified Transmission Project Sponsor will include the following information:

- (i) the current and expected capabilities of the applicant to finance and construct a Reliability Transmission Upgrade, Market Efficiency Transmission Upgrade or Public Policy Transmission Upgrade and operate and maintain it for the life of the project;
- (ii) the financial resources of the applicant;

- (iii) the technical and engineering qualifications and experience of the applicant;
- (iv) if applicable, the previous record of the applicant regarding construction and maintenance of transmission facilities;
- (v) demonstrated capability of the applicant to adhere to construction, maintenance and operating Good Utility Practices, including the capability to respond to outages;
- (vi) the ability of the applicant to comply with all applicable reliability standards; and
- (vii) demonstrated ability of the applicant to meet development and completion schedules.

#### **4B.3 Review of Qualifications**

The ISO shall review each application for completeness. The ISO will notify each applicant within 30 calendar days of receipt of such application whether the application is complete, or identify any deficiencies in provision of the information required by Section 4B.2 of this Attachment. An applicant notified of deficiencies must provide any remedial information within 30 calendar days of the receipt of such notice. Thereafter, the ISO will determine whether the applicant is physically, technically, legally, and financially capable of constructing a Reliability Transmission Upgrade, Market Efficiency Transmission Upgrade or Public Policy Transmission Upgrade in a timely and competent manner, and operating and maintaining the facilities consistent with Good Utility Practice and applicable reliability criteria for the life of the project, and use its best efforts to inform the applicant within 90 days from the date on which it has a completed application on file with the ISO whether it has met all of these criteria. A PTO determined by the ISO to meet all of these criteria will be deemed a Qualified Transmission Project Sponsor. A non-PTO entity determined by the ISO to meet all of these criteria will, upon its execution of the Non-incumbent Transmission Developer Operating Agreement (in the form specified in Attachment O of the OATT) and the Market Participant Service Agreement, be deemed a Qualified Transmission Project Sponsor.

#### **4B.4 List of Qualified Transmission Project Sponsors**

Qualified Transmission Project Sponsors are listed in Appendix 3 of this Attachment K.

#### **4B.5 Annual Certification**

Each Qualified Transmission Project Sponsor shall submit to the ISO annually a certification that the information initially submitted in response to Section 4B.2 of this Attachment K has not

changed adversely in a material fashion, or (if a material adverse change has occurred in the intervening year) submit instead a new application for qualification as a project sponsor. In the latter case, the entity shall not be a Qualified Transmission Project Sponsor unless and until the ISO approves its new application.

## **5. Supply of Information and Data Required for Regional System Planning**

The Transmission Owners, Generator Owners, Transmission Customers, Market Participants and other entities requesting transmission or interconnection service or proposing the integration of facilities to PTF in the New England Transmission System or alternatives to such facilities, and stakeholders requesting a Needs Assessment pursuant to Section 4.1 of this Attachment, shall supply, as required by the Tariff, the Participants Agreement, MPSAs, applicable transmission operating agreements, and/or other existing agreements, protocols and procedures, or upon request by the ISO, and subject to required CEII and confidentiality protections as specified in Section 2.4 of this Attachment, any information (including cost estimates) and data that is reasonably required to prepare an RSP or perform a Needs Assessment, Solutions Study, or any other study performed under this Attachment K.

## **6. Regional, Local and Interregional Coordination**

### **6.1 Regional Coordination**

The ISO shall conduct the regional system planning process for the PTF in coordination with the transmission-owning entities in, or other entities interconnected to, the New England Transmission System consistent with the rights and obligations defined in the ISO OATT, applicable transmission operating agreements or protocols, and/or this Attachment. Pursuant to Section II.49 of this OATT and Sections 3.02, 3.05 and 3.09 of the TOA, the ISO has Operating Authority or control over all PTF and Non-PTF within the New England Control Area, which are utilized for the provision of transmission service under this OATT. The ISO also has Operating Authority or control over the United States portions of the HVDC ties to Quebec and over Merchant Transmission Facilities and Other Transmission Facilities, pursuant to this OATT or applicable transmission operating agreements or protocols. The ISO, however, is not responsible for the planning of the Non-PTF, OTF and MTF. As provided in Section 6.2 and Appendix 1 of this Attachment, the PTOs are responsible for the planning of the Non-PTF and coordinating such planning efforts with the ISO. Pursuant to the OATT and/or applicable transmission operating agreements or protocols, the transmission owners of OTF and MTF are required to participate

in the ISO's regional system planning process and perform and/or support studies of the impacts of regional system projects on their respective facilities.

## **6.2 Local Coordination**

The regional system planning process shall be conducted and the RSP shall be developed in coordination with the local system plans of the PTOs. In accordance with the TOA and OATT provisions identified in Section 6.1 of this Attachment, the PTOs have responsibility for planning Non-PTF. The PTOs conduct planning of Non-PTF using the LSP process outlined in Section 2.5 and Appendix 1 of this Attachment, in coordination with the ISO, other entities interconnected with the New England Transmission System, Transmission Customers and stakeholders, and in accordance with the provisions in the TOA, the OATT and the Planning and Reliability Criteria. The openness and transparency of the LSP process is intended to be consistent with the regional system planning process.

## **6.3 Interregional Coordination**

The regional system planning process shall be conducted and the RSP shall be developed in coordination with the similar plans of the surrounding ISOs/RTOs and Control Areas pursuant to the Northeastern Planning Protocol and other agreements with neighboring systems (including entities that are not Parties to the Northeastern Planning Protocol) and NPCC.

### **(a) Interregional Coordination and Cost Allocation Among ISO, New York Independent System Operator, Inc. ("NYISO") and PJM Interconnection, L.L.C. ("PJM") Under Order No. 1000**

Pursuant to Section 7 of the Northeastern Planning Protocol (which is posted on the web at [www.iso-ne.com/static-assets/documents/2015/07/northeastern\\_protocol\\_dmeast.doc](http://www.iso-ne.com/static-assets/documents/2015/07/northeastern_protocol_dmeast.doc)), the Joint ISO/RTO Planning Committee ("JIPC") reviews regional needs and solutions identified in the regional planning processes of the ISO, NYISO and PJM in order to identify, with input from the Interregional Planning Stakeholder Advisory Committee ("IPSAC"), the potential for Interregional Transmission Projects that could meet regional needs more efficiently or cost-effectively than regional transmission projects. All members of the Planning Advisory Committee shall be considered IPSAC members. The JIPC will coordinate studies deemed necessary to allow the effective consideration by the regions, in the same general timeframe, of a proposed Interregional Transmission Project in comparison to regional transmission solutions.

Any stakeholder may propose in the New England planning process, for evaluation under Section 4.2, 4.3, or 4A (as applicable) of Attachment K, an Interregional Transmission Project (or project concept) that may be more efficient or cost-effective than a regional transmission solution. If a proposed Interregional Transmission Project is approved in each region in which the project is located, the corresponding New England regional transmission project(s) will be displaced in the circumstances described in Section 3.6(a) of this Attachment, and the costs of the Interregional Transmission Project will be allocated among the regions based on the formula provided in Schedule 15 of this OATT, or in accordance with another funding arrangement filed with and accepted by the Commission. The amount of the costs of an Interregional Transmission Project allocated as the responsibility of New England pursuant to the methodology referenced in Section 6.3(a) of this Attachment shall be allocated within New England as specified in Schedule 15 of the ISO OATT.

**(b) Other Interregional Assessments and Other Interregional Transmission Projects**

Interregional system assessments and/or interregional system expansion planning studies may be performed periodically by the ISO with Planning Authorities who are not parties to the Northeastern Planning Protocol, or with the JIPC pursuant to Section 6 of the Northeastern Planning Protocol, or both. The ISO shall convene periodic meetings of the Planning Advisory Committee (which may be combined with meetings of the IPSAC), to provide input and feedback to the ISO concerning such assessments and studies. To the extent that an Interregional Transmission Project is agreed to by ISO and by another region (not a Party to the Northeastern Planning Protocol) in which a portion of the project is located, the related cost allocation and operating agreements will be filed with the Commission (and, as applicable, with Canadian jurisdictional agencies) in accordance with existing filing rights.

**7. Procedures for Development and Approval of the RSP**

**7.1 Initiation of RSP**

No less often than once every three years, the ISO shall initiate an effort to develop its RSP and solicit input on regional system needs for the RSP from the Planning Advisory Committee. The Planning Advisory Committee shall meet to perform its respective functions in connection with the preparation of the RSP, as specified in Section 2 of this Attachment. The ISO shall issue the periodic planning reports that support the RSP, such as Needs Assessments, as those reports are completed.



## **7.2 Draft RSP; Public Meeting**

The ISO shall provide a draft of the RSP to the Planning Advisory Committee and input from that Committee shall be received and considered in preparing and revising subsequent drafts. The ISO shall post the draft RSP and provide notice to the Planning Advisory Committee of a meeting to review the draft RSP as specified in Section 2.2 of this Attachment.

After the ISO has provided a draft of the RSP to the Planning Advisory Committee, the ISO shall issue a second draft of the RSP to be presented by the ISO staff to the ISO Board of Directors for approval. The draft RSP shall incorporate the results of any Needs Assessment, and corresponding Solutions Studies, performed since the last RSP was approved. A subcommittee of that Board shall hold a public meeting, at their discretion, to receive input directly and to discuss any proposed revisions to the RSP. The final recommended RSP shall be presented to the ISO Board of Directors and shall be acted on by the ISO Board of Directors within 60 days of receipt. The foregoing timeframes are subject to adjustment as determined by the ISO in coordination with the Planning Advisory Committee.

## **7.3 Action by the ISO Board of Directors on RSP; Request for Alternative Proposals**

### **(a) Action by ISO Board of Directors on RSP**

The ISO Board of Directors may approve the recommended draft RSP as submitted, modify the RSP or remand all or any portion of it back with guidance for development of a revised recommendation. The Board of Directors may consider the RSP in executive session, and shall consider in its deliberations the views of the subcommittee of the Board of Directors reflecting the public meeting held pursuant to Section 7.2 of this Attachment. In considering whether to approve the draft RSP, the Board of Directors may, if it finds a proposed Reliability Benefit Upgrade not to be viable, or if no Reliability Benefit Upgrade has been proposed, direct the ISO staff to meet with the affected load serving entities and State entities in order to develop an interim solution. Should that effort fail, and as a last resort, the Board of Directors may direct the ISO to issue a Request For Alternative Proposal (“RFAP”), subject to the procedures described below, and may withhold approval of the draft RSP, or portions thereof, pending the results of that RFAP and any Commission action on any resulting jurisdictional contract or funding mechanism. The ISO shall provide a written explanation as to any subsequent changes or modification made in the final version of the RSP.

**(b) Requests For Alternative Proposals**

(i) The RFAP shall seek generation, demand-side and merchant transmission alternatives that can be implemented rapidly and provide substantial reliability benefits over the period solicited in the RFAP, and normally will focus on an interim (“gap”) solution until an identified Reliability Transmission Upgrade has been placed in-service. The ISO will file a proposed RFAP with the Commission for approval at least 60 days prior to its issuance. The filing shall explain why the issuance of an RFAP is necessary.

(ii) The ISO staff shall provide the Board of Directors and subject to confidentiality requirements, the Planning Advisory Committee with an analysis of the alternatives offered in response to the RFAP, and provide a recommendation together with a funding mechanism reflecting input from the Planning Advisory Committee.

(iii) The ISO may enter into contracts awarded pursuant to an RFAP process, and/or propose a funding mechanism. Bidders that are awarded contracts through the RFAP process shall file those contracts with the Commission for approval of the rates to be charged thereunder to the extent that such contracts are for services that are jurisdictional to the Commission. The ISO shall file related or separate funding mechanisms with the Commission as well. All other contracts entered into pursuant to an RFAP shall be filed with the Commission for informational purposes.

(iv) The Board of Directors will reflect the results of the RFAP process in the approved RSP.

**8. Obligations of PTOs to Build; PTOs’ Obligations, Conditions and Rights**

In accordance with the TOA, PTOs designated by the ISO as the appropriate entities to construct and own or finance Transmission Upgrades included in the RSP shall construct and own or finance such facilities or enter into appropriate contracts to fulfill such obligations. In the event that a PTO: (i) does not construct or indicates in writing that it does not intend to construct a Transmission Upgrade included in the RSP; or (ii) demonstrates that it has failed (after making a good faith effort) to obtain necessary approvals or property rights under applicable law, the ISO shall promptly file with the Commission a

report on the results of the planning process, which report shall include a report from the PTO responsible for the planning, design or construction of such Open Access Transmission Tariff Section II – Attachment K – Regional System Planning Process Transmission Upgrade, in order to permit the Commission to determine what action, if any, it should take.

In connection with regional system planning, the ISO will not propose to impose on any PTO obligations or conditions that are inconsistent with the explicit provisions of the TOA or deprive any PTO of any of the rights set forth in the TOA.

Subject to necessary approvals and compliance with Section 2.06 of the TOA, nothing in this OATT shall affect the right of any PTO to expand or modify its transmission facilities in the New England Transmission System on its own initiative or in response to an order of an appropriate regulatory authority. Such expansions or modifications shall conform with: (a) Good Utility Practice; (b) applicable reliability principles, guidelines, criteria, rules, procedures and standards of national, regional, and local reliability councils that may be in existence; and (c) the ISO and relevant PTO criteria, rules, standards, guides and policies. The ISO reserves its right to challenge the permitting of such expansions or modifications.

## **9. Merchant Transmission Facilities**

### **9.1 General**

Subject to compliance with the requirements of the Tariff and any other applicable requirements with respect to the interconnection of bulk power facilities with the New England Transmission System, any entity shall have the right to propose and construct the addition of transmission facilities (“Merchant Transmission Facilities”), none of the costs of which shall be covered under the cost allocation provisions of this OATT. Any such Merchant Transmission Facilities shall be subject to the requirements of Section 9.2 of this Attachment. In performing studies in connection with the RSP, the prospect that proposed Merchant Transmission Facilities will be completed shall be accounted for as will the prospect that proposed generating units will be completed.

### **9.2 Operation and Integration**

All Merchant Transmission Facilities shall be subject to: (i) an agreement to transfer to the ISO operational control authority over any facilities which constitute part of the Merchant Transmission

Facilities that are to be integrated with, or that will affect, the New England Transmission System; and (ii) taking such other action as may be required to make the facility available for use as part of the New England Transmission System.

### **9.3 Control and Coordination**

Until such time as a Merchant Transmission Owner has transferred operational control over its Merchant Transmission Facilities to the ISO pursuant to Section 9.2(i), all such Merchant Transmission Facilities shall be subject to the operational control, scheduling and maintenance coordination of the System Operator in accordance with the Tariff.

## **10. Cost Responsibility for Transmission Upgrades**

The cost responsibility for each upgrade, modification or addition to the transmission system in New England that is included with the status of “Planned” in the RSP Project List as defined in Section 3.6 of this Attachment shall be determined in accordance with Schedule 12 of this OATT.

## **11. Allocation of ARRs**

The allocation of ARRs in connection with Transmission Upgrades is addressed in Section III.C.8 of the Tariff.

## **12. Dispute Resolution Procedures**

### **12.1 Objective**

Section 12 of this Attachment sets forth a dispute resolution process (the “Regional Planning Dispute Resolution Process”) through which regional transmission planning-related disputes may be resolved as expeditiously as possible.

### **12.2 Confidential Information and CEII Protections**

All information disclosed in the course of the Regional Planning Dispute Resolution Process shall be subject to the protection of confidential information and CEII consistent with the ISO New England Information Policy and CEII policy.

### **12.3 Eligible Parties**

Any member of the Planning Advisory Committee that has been adversely affected by a Reviewable Determination, defined in Section 12.4(a) of this Attachment, with respect to the regional system planning process described in this Attachment is eligible to raise its dispute, as appropriate, under this Dispute Resolution Process (“Disputing Party”).

## **12.4 Scope**

In order to ensure that the regional transmission planning process set forth under this Attachment moves expeditiously forward, the scope of issues that may be subject to the Regional Planning Dispute Resolution Process under this Section 12 shall be limited to certain key procedural and substantive decisions made by the ISO within its authority as specified in documents on file with the Commission. That is, decisions not subject to resolution within the jurisdiction of the Commission are not within the scope of the Regional Planning Dispute Resolution Process. Examples of matters not within the scope of the Regional Planning Dispute Resolution Process include planning to serve retail native load or state siting issues. Additionally, the Tariff already explicitly provides specific dispute resolution procedures for various matters. To this end, any matter regarding the review and approval of applications pursuant to Section I.3.9 of the Tariff, which is subject to the dispute resolution process under Section I.6 of the Tariff, shall not be within the scope of this Regional Planning Dispute Resolution Process. Similarly, any matter regarding Transmission Cost Allocation shall be governed by the dispute resolution process under Schedule 12 of the OATT, and shall be outside the scope of this Regional Planning Dispute Resolution Process.

### **(a) Reviewable Determinations**

The determinations that may be subject to the Regional Planning Dispute Resolution Process under this Section 12 that include certain procedural and substantive challenges that may arise at limited designated key decision points in the regional transmission planning process for PTF. Procedural challenges will be limited to whether or not the steps taken up to a designated key decision point conform to the requirements set forth in this Attachment. Substantive challenges will be limited to whether or not a determination or conclusion rendered at a designated key decision point was supported by adequate basis in fact.

The designated key decision points for Reviewable Determinations shall be limited to the following:

- (i) Results of a Needs Assessment conducted and communicated by the ISO to the Planning Advisory Committee as specified in Section 4.1 of this Attachment;
- (ii) Updates to the RSP Project List, including adding, removing or revising regulated transmission solutions included thereunder, as presented at the Planning Advisory Committee and as specified in Section 3.6 of this Attachment;
- (iii) Results of Solutions Studies conducted and communicated by the ISO to the Planning Advisory Committee as specified in Section 4.2 of this Attachment;
- (iv) Consideration of market responses in Needs Assessments as specified in Section 4.1(f) of this Attachment;
- (v) Prioritization and Substance of Stakeholder-Requested Scenarios ~~Economic Studies~~ to be conducted by the ISO in a given year-Economic Study cycle as specified in Section 17.2(d)~~4.1(b)~~ of this Attachment; and
- (vi) Prioritization of Economic ~~Studies~~ Study scenario sensitivities to be performed in a given year-Economic Study cycle where the Planning Advisory Committee is not able to prioritize them as specified in Section ~~4.1(b)~~ 17.4 of this Attachment.

**(b) Material Adverse Impact**

In order to prevail in a challenge to a procedural-based Reviewable Determination, the Disputing Party must show that the alleged procedural error had a material adverse impact on the determination or conclusion. In order to prevail in a challenge to a substantive-based Reviewable Determination, the Disputing Party must show that either (i) the determination is based on incorrect data or assumptions or (ii) incorrect analysis was performed by the ISO, and (iii) as a result the ISO made an incorrect decision or determination.

## 12.5 Notice and Comment

A Disputing Party aggrieved by a Reviewable Determination shall have fifteen (15) calendar days upon learning of the Reviewable Determination following the ISO's presentation of such Reviewable Determination at the Planning Advisory Committee to request dispute resolution by giving notice to the ISO ("Request for Dispute Resolution"). A Request for Dispute Resolution shall be in writing and shall be addressed to the ISO's Chair of the Planning Advisory Committee and, as appropriate, the affected Transmission Owner. Within three (3) Business Days of the receipt by the ISO of a Request for Dispute Resolution, the ISO shall prepare and distribute to all members of the Planning Advisory Committee a notice of the Request for Dispute Resolution including, subject to the protection of Confidential Information and CEII, the specifics of the Request for Dispute Resolution and providing the name of an ISO representative to whom any comments may be sent. Any member of the Planning Advisory Committee may submit to the ISO's designated representative, on or before the tenth (10th) Business Day following the date the ISO distributes the notice of the Request for Dispute Resolution, written comments to the ISO with respect to the Request for Dispute Resolution. The party filing the Request for Dispute Resolution may respond to any such comments by submitting a written response to the ISO's designated representative and to the commenting party on or before the fifteenth (15th) Business Day following the date the ISO distributes the notice of the Request for Dispute Resolution. The ISO may, but is not required to, consider any written comments.

## **12.6 Dispute Resolution Procedures**

### **(a) Resolution Through the Planning Advisory Committee**

The Planning Advisory Committee shall discuss and resolve any dispute arising under this Attachment involving a Reviewable Determination, as defined in Section 12.4 of this Attachment, between and among the ISO, the Disputing Party, and, as appropriate, the affected Transmission Owner (collectively, "Parties") (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution).

### **(b) Resolution Through Informal Negotiations**

To the extent that the Planning Advisory Committee is not able to resolve a dispute arising under this Attachment involving a Reviewable Determination, as defined in Section 12.4 of this Attachment, between and among the ISO, the Disputing Party, and, as appropriate, the affected Transmission Owner, such dispute shall be the subject of good-faith negotiations among the

Parties. Each Party shall designate a fully authorized senior representative for resolution on an informal basis as promptly as practicable.

**(c) Resolution Through Alternative Dispute Resolution**

In the event the designated representatives are unable to resolve the dispute through informal negotiation within thirty (30) days, or such other period as the Parties may agree upon, by mutual agreement of the Parties, such dispute may be submitted to mediation or any other form of alternative dispute resolution upon the agreement of all Parties to participate in such mediation or other alternative dispute resolution process. Such form of alternative dispute resolution shall not include binding arbitration.

If a Party identifies exigent circumstances reasonably requiring expedited resolution of the dispute, such Party may file a Complaint with the Commission or seek other appropriate redress before a court of competent jurisdiction.

**12.7 Notice of Dispute Resolution Process Results**

Within three (3) Business Days following the resolution of a dispute pursuant to either Section 12.6(b) or Section 12.6(c) of this Attachment, the ISO shall distribute to the Planning Advisory Committee a document reflecting the resolution.

**13. Rights Under The Federal Power Act**

Nothing in this Attachment shall restrict the rights of any party to file a Complaint with the Commission under relevant provisions of the Federal Power Act.

**14. Annual Assessment of Transmission Transfer Capability**

Each year, the ISO shall issue the results of the annual assessment of transmission transfer capability, conducted pursuant to applicable NERC, NPCC and ISO New England standards and criteria and the identification of potential future transmission system weaknesses and limiting facilities that could impact the transmission system's ability to reliably transfer energy in the planning horizon. Each annual assessment will identify those portions of the New England system, along with the associated interface boundaries, that should be considered in the assessment of Capacity Zones to be modeled in the Forward Capacity Market pursuant to ISO Tariff Section III.12. This report will be posted on the ISO website. Each annual assessment will model out-of-service resources associated with the following bids, if the ISO



determines the removal of the resource is likely to have an impact on the transmission transfer limits for the relevant period: Retirement De-List Bids, Permanent De-List Bids, demand bids submitted for the upcoming substitution auction, and rejected for reliability Static De-List Bids and rejected for reliability Dynamic De-List Bids from the most recent Forward Capacity Auction.

## **15. Procedures for the Conduct of Cluster Enabling Transmission Upgrades Regional Planning Study**

The purpose of this Section 15 is to support the conduct of Interconnection Studies under the Interconnection Procedures set forth in Schedules 22, 23 and 25 of Section II of the Tariff. Other than Section 2 of this Attachment K regarding the responsibilities of the Planning Advisory Committee and this Section 15, none of the other provisions in this Attachment K apply to the conduct of the Cluster Enabling Transmission Upgrade Regional Planning Study or the results of the study.

### **15.1 Notice of Initiation of Cluster Enabling Transmission Upgrade Regional Planning Study in Support of Cluster Studies under the Interconnection Procedures.**

Pursuant to Section 4.2.2 of Schedule 22, Section 1.5.3.2 of Schedule 23, and Section 4.2.2 of Schedule 25 of Section II of this Tariff, the ISO shall provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests. The cluster study process, known as Clustering, shall consist of two phases. This notice shall trigger the first phase of Clustering, during which the ISO shall conduct a Cluster Enabling Transmission Upgrade (“CETU”) Regional Planning Study (“CRPS”) (the cost of which will be recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff). In the second phase of Clustering, the ISO shall conduct Interconnection System Impact Studies and Interconnection Facilities Studies in clusters pursuant to Schedules 22, 23 and 25 of Section II of the Tariff.

### **15.2 Preparation for Conduct of CRPS; Stakeholder Input**

The purpose of the CRPS shall be to identify the new transmission infrastructure and any associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests for which the conditions identified in Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff have been triggered. The ISO will prepare and post on its website, consistent with Section 2.4(d) of this Attachment K, a proposed scope of the CRPS and associated parameters and assumptions, and provide the foregoing to the

Planning Advisory Committee. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit stakeholder input for consideration by the ISO on the CRPS's scope, parameters and assumptions, consistent with the responsibilities of the Planning Advisory Committee as set forth in Section 2.2 of this Attachment. As part of the CRPS's scope, the ISO will describe the circumstances that triggered the conditions in Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff. In addition, the ISO will identify: (i) the Interconnection Requests, to be referenced by Queue Position, that are expected to be eligible to participate in the Cluster Interconnection System Impact Study, and (ii) the preliminary transmission upgrade concepts proposed to be considered in the CRPS. The preliminary transmission upgrade concepts may account for previously conducted transmission reinforcement studies and previously identified concepts for transmission upgrades in the relevant electrical area, including Elective Transmission Upgrades with Interconnection Requests pending in the interconnection queue prior to the initiation of the CRPS.

A member of the Planning Advisory Committee or an Interconnection Customer may make a written submission to the ISO, requesting that Clustering be considered for specific Interconnection Requests in the ISO New England interconnection queue. In response to such a request, the ISO will either develop a notice of initiation of a cluster pursuant to Section 15.1 of this Attachment K, or identify, in writing, to the Planning Advisory Committee why the conditions in Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff have not been triggered.

### **15.3 Conduct of the CRPS**

The CRPS will consist of analyses performed under the conditions used in the conduct of an Interconnection System Impact Study under the Interconnection Procedures. The CRPS will consist of steady state thermal analysis, voltage and transient stability analysis, and, as appropriate, other analysis, such as weak-grid-related analyses. The ISO will use Reasonable Efforts to complete the CRPS within twelve (12) months from the notice of the cluster initiation to the Planning Advisory Committee. If less than two (2) Interconnection Requests identified pursuant to Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff remain in the interconnection queue prior to the completion of the CRPS, the ISO will terminate the CRPS.

### **15.4 Publication of the CRPS**

The ISO shall post a draft report of the CRPS to the Planning Advisory Committee, consistent with Section 2.4(d) of this Attachment K, and a meeting of the Planning Advisory Committee will be held promptly thereafter in order to discuss the results of the CRPS. A comment period will follow the Planning Advisory Committee meeting. The ISO will post on its website any comments received and the ISO's responses to those comments.

The CRPS report will provide:

- (i) a planning level description of the CETU(s) and a non-binding good faith order-of-magnitude estimate, developed by the applicable Transmission Owner(s), of the costs for the CETU(s);
- (ii) a list of other facilities that may be needed in addition to the CETU(s) and a non-binding good faith order-of-magnitude estimate, developed by the applicable Transmission Owner(s), of the costs for those facilities (the CRPS will not provide descriptions of expected Interconnection Facilities for specific Interconnection Requests in the cases where the Interconnection Facilities cannot be finalized until the actual Interconnection Requests that will be moving forward in the cluster are known);
- (iii) the approximate megawatt quantity (or quantities if more than one level of megawatt injection was studied in the CRPS) of resources that could be interconnected in a manner that meets the Network Capability Interconnection Standard and the Capacity Capability Interconnection Standard in accordance with Schedules 22, 23 and 25 of Section II of the Tariff; and,
- (iv) a list of the Interconnection Requests, to be referenced by Queue Position, that at the sole discretion of the ISO are identified as eligible to participate in the Cluster Interconnection System Impact Study that will be conducted by the ISO in accordance with Section 4.2.3 of Schedule 22, Section 1.5.3.3 of Schedule 23, and Section 4.2.3 of Schedule 25 of Section II of the Tariff. The list shall include the expected cost allocation for the eligible Interconnection Requests, calculated in accordance with Schedule 11 of Section II of the Tariff.

The non-binding good faith order-of-magnitude estimates under Section 15.4(i)-(ii) of this Attachment will be developed by the applicable Transmission Owner(s), and the costs of developing such estimates shall be recovered as specified in Sections 3.3.1, 6.1 and 7.2 of Schedule 22, Section 3.3.1, 3.4.2, and Attachment 1 of Schedule 23, and Section 3.3.1, 6.1 and 7.2 of Schedule 25.

The posting, consistent with Section 2.4 (d) of this Attachment K, of the final CRPS report on the ISO website will trigger the Cluster Interconnection System Impact Study Entry Deadline specified in Section 4.2.3.1 of Schedule 22, Section 1.5.3.3.1 of Schedule 23, and Section 4.2.3.1 of Schedule 25 of Section II of the Tariff. The Cluster Interconnection System Impact Study Entry Deadline shall be 30 days from the posting of the final CRPS report.

Notwithstanding any other provision in this Section 15, the final Maine Resource Integration Study shall be the first CRPS and will form the basis for the first Cluster Interconnection System Impact Study to be conducted in accordance with Section 4.2.3 of Schedule 22, Section 1.5.3.3 of Schedule 23, and Section 4.2.3 of Schedule 25 of Section II of the Tariff.

## **16. Procedures for the Conduct of Longer-Term Transmission Studies**

This Section 16 sets forth the procedures for the ISO's conduct of Longer-Term Transmission Studies. Other than Section 2, regarding the responsibilities of the Planning Advisory Committee, Section 5, regarding the supply of information, and this Section 16 of this Attachment K, none of the other provisions in this Attachment K apply to the conduct of the Longer-Term Transmission Studies. These procedures supplement, and are not intended to replace, other study processes provided in this Attachment K.

### **16.1 Request for Longer-Term Transmission Studies**

NESCOE may submit a request for the ISO to conduct a Longer-Term Transmission Study to identify high-level concepts of transmission infrastructure and, if requested, high-level cost estimates that could meet State-identified Requirements specified in the request based on state-identified scenarios and timeframes, which may extend beyond the five-to-ten year planning horizon. A request for a Longer-Term Transmission Study may be submitted to the ISO no earlier than six months from conclusion of the prior study. The Longer-Term Transmission Study request shall identify the State-identified

Requirements that serve as the basis of the request; the proposed objectives of the study; and the scenarios and timeframe(s) proposed for use in the study.

## **16.2 Preparation for Conduct of the Longer-Term Transmission Studies; Stakeholder Input**

Upon receipt of a request for a Longer-Term Transmission Study from NESCOE, the ISO will post the request on the ISO's website. A meeting of the Planning Advisory Committee will be held promptly thereafter for NESCOE to present the Longer-Term Transmission Study request. NESCOE will then provide the ISO written confirmation of the specific scenarios to be analyzed in the study, together with the specific information to facilitate the conduct of the study, including, but not limited to: assumptions, types and location of new resource development, location of new loads and load serving stations, and injection points or geographic zones. The ISO will then develop a scope of work that may be performed, and post on the ISO's website the Longer-Term Transmission Study's proposed scope of work, associated parameters, and assumptions. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit stakeholder input on the study's scope, parameters, and assumptions. Members of the Planning Advisory Committee shall direct all such input related to the Longer-Term Transmission Study's scope, parameters, and assumptions to the ISO for consideration by the ISO and NESCOE, as applicable. Depending on the scope and objectives of a Longer-Term Transmission Study request, the ISO may request information to support consideration of new loads in the study. The ISO will provide the final scope of work for the Longer-Term Transmission Study to NESCOE for confirmation, and once written confirmation is received, will post the final scope of work on the ISO's website.

## **16.3 Conduct of the Longer-Term Transmission Study; Stakeholder Input**

The ISO, in consultation with NESCOE, will perform the Longer-Term Transmission Study, supplemented by third-party consultants as necessary. The ISO may ask Participating Transmission Owners or Planning Advisory Committee members with special expertise to provide technical support or assist in the performance of the study. The study will consist of transmission system analysis to be performed under the conditions specified in the confirmed scope of work. If the ISO identifies a need to deviate from the final scope of work, the ISO will consult with NESCOE prior to incorporating the change. Once NESCOE provides written confirmation, the ISO will notify the Planning Advisory

Committee of any changes. The study will assess the ability of the PTF to meet applicable planning criteria under the provided conditions.

The costs of the performance of the Longer-Term Transmission Study will be recovered pursuant to Schedule 1 of Section IV.A of the Tariff.

The ISO will post on the ISO's website the results of the Longer-Term Transmission Study. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input on the study results. Members of the Planning Advisory Committee shall direct all such input related to the Longer-Term Transmission Study results to the ISO for consideration by the ISO and NESCOE, as applicable.

The ISO, in consultation with NESCOE, will prepare a Longer-Term Study report. The report will identify the overview of transmission system limitations and the high-level concepts of transmission infrastructure and, if requested, associated cost estimates, required to solve the longer-term issues identified in the study based on the state-identified scenarios and timeframe.

## **17. Procedures for the Conduct of Economic Studies**

This Section 17 sets forth the procedures for the ISO's conduct of Economic Studies.

### **17.1 Overview**

The Economic Study process shall be used to identify market efficiency issues on the PTF portion of the New England Transmission System and, as applicable, evaluate competitive solutions to alleviate identified market efficiency needs. The process will also provide information to facilitate the evaluation of economic and environmental impacts of New England regional policies, federal policies, and various resource technologies on satisfying future resource needs in the region.

### **17.2 Economic Study Reference Scenarios**

The ISO shall develop and study the following four reference scenarios. The ISO shall consult with, and consider the input from, the Planning Advisory Committee on the scope, parameters, and assumptions used in modeling the scenarios described in this Section 17.2.

#### **(a) Benchmark Scenario**

The purpose and scope of the Benchmark Scenario is to improve the economic planning model and associated assumptions and criteria used in the other scenarios by comparing it against historical performance of the system in the previous year and adjusting the assumptions and model accordingly. This scenario will help identify any modeling issues in the base set of input data.

The initial economic planning model will use the existing base case model and data and may be adjusted based on historical performance and observations. Historical performance of the system includes recorded observations from the prior year to the beginning of the study cycle.

The study year shall be year N-1 and the simulation length shall be one year for the Benchmark Scenario.

Any identified market efficiency issues resulting from a Benchmark Scenario shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

**(b) Market Efficiency Needs Scenario**

The purpose and scope of the Market Efficiency Needs Scenario is to identify market efficiency issues on the PTF portion of the New England Transmission System at the end of the ten-year planning horizon pursuant to Section 17.5 of this Attachment. Pursuant to Section 4.1 of this Attachment, the ISO shall conduct a market efficiency Needs Assessment to evaluate and determine whether market efficiency issues identified in a Market Efficiency Needs Scenario are market efficiency needs.

The model used for the Market Efficiency Needs Scenario shall be the updated base case from the Benchmark Scenario and forecasted out to the ten-year planning horizon year using assumptions and criteria in Section 4.1(f) of this Attachment.

The study year shall be year N+10 and the simulation length shall be one year for the Market Efficiency Needs Scenario.

**(c) Policy Scenario**

The purpose and scope of the Policy Scenario is to identify any potential market efficiency issues resulting from the New England states' energy policies and goals, among others (e.g., federal legislation, state legislation, or utility renewable portfolio standard targets). The policies and goals selected for the Policy Scenario shall be selected by the ISO and Planning Advisory Committee pursuant to Section 17.4 of this Attachment.

The model used for the Policy Scenario shall be the base case model resulting from the Benchmark Scenario and forecasted out to a year when relevant New England and other applicable energy policies and goals are in full effect.

The study year for the Policy Scenario shall be dependent on deadlines for achieving the New England region and other energy policies and goals. However, the study year will be at least ten years into the future and cover the deadlines for achieving all applicable goals and policies. The study simulation length shall be one year.

The results from studying a Policy Scenario shall be used for informational purposes only. Any identified market efficiency issues resulting from a Policy Scenario shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

**(d) Stakeholder-Requested Scenario**

The purpose of the Stakeholder-Requested Scenario is to study a scenario with a region-wide scope that is requested by stakeholders and not covered by the other scenarios described in this Section 17.

The model used for the Stakeholder-Requested Scenario shall be the base case model resulting from the Benchmark Scenario and then forecasted out to a year with assumptions requested by the stakeholders and agreed upon by the ISO.

The study year shall be dependent on the requested scenario and the simulation length shall be one year.



The results from studying a Stakeholder-Requested Scenario shall be used for informational purposes only. Any identified market efficiency issues resulting from a Stakeholder-Requested Scenario shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

### **17.3 Frequency, Initiation, and Schedule**

The Economic Study process shall be conducted at least once every three years and at most once every two years. The process shall be initiated for the first time under this Section 17 in January 2024.

Each Economic Study cycle shall be initiated by the ISO providing the Planning Advisory Committee with notice that the ISO will be initiating the process for the Economic Study cycle. The ISO shall provide to the Planning Advisory Committee the schedule for the Economic Study cycle within three months of initiating the process. The schedule shall include dates for the ISO's collection, and stakeholders' submission, of data to be used in the studies, the preparation of models, the completion of studies, and the issuance of study results. The schedule shall include a one-month period for stakeholders to submit proposals for the Stakeholder-Requested Scenario. If the Economic Study cycle and potential resulting competitive request for proposals process cannot be completed within the initial schedule, the ISO shall notify stakeholders of such, provide a revised estimated completion date, and provide an explanation of the reason or reasons why the additional time is required.

### **17.4 Preparation of the Economic Study Reference Scenarios and Stakeholder Sensitivity Requests**

The ISO shall prepare and post on its website a proposed scope for the scenarios described in Section 17.2, and the associated parameters and assumptions. The ISO shall either provide the Planning Advisory Committee with notice that the ISO posted the information or send the information itself to the Planning Advisory Committee after it is posted. A Planning Advisory Committee meeting will be held thereafter to solicit stakeholder input for consideration by the ISO on the study's scope, parameters, and assumptions.

Following the analyses, runs, and presentation of the results of the Economic Study reference scenarios described in Section 17.2, stakeholders may request, and the ISO may propose, additional sensitivities to test the effect of a specific change to input assumptions. The sensitivities shall be limited to a single theme or

category of changes to allow for better understanding of the causal effect of the change to the results. The ISO shall prioritize and list the sensitivities that can be completed during the Economic Study cycle taking into consideration the impact of the additional efforts on the ISO resources and other priorities.

Results from studies conducted with stakeholder-requested scenario sensitivities shall be used for information purposes only. Any identified market efficiency issues resulting from a study with a stakeholder-requested scenario sensitivity shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

### **17.5 Market Efficiency Needs Assessment**

The ISO shall use the Market Efficiency Needs Scenario and criteria in Attachment N to identify market efficiency issues on the PTF portion of the New England Transmission System and, as applicable, identify market efficiency needs on the PTF portion of the New England Transmission System.

All of the market efficiency issues and associated benefits of relieving those issues will be documented in a market efficiency Needs Assessment conducted pursuant to Section 4.1 of this Attachment.

Any market efficiency issues that meet the criteria in Attachment N will be identified as market efficiency needs, and a request for proposal or multiple requests for proposals will be issued to initiate the competitive solution process for Market Efficiency Transmission Upgrades to address the identified market efficiency need or needs pursuant to Section 4.3 of this Attachment.

### **17.6 Evaluation of Regulated Transmission Solutions for Market Efficiency Transmission Upgrades**

The process in Section 4.3 of this Attachment shall be used to solicit and evaluate competitive solutions for identified market efficiency needs.

### **17.7 Stakeholder Input on Study Results**

After the results from the Economic Study reference scenarios described in Section 17.2 and stakeholder-requested scenario sensitivities described in Section 17.4 are available, the ISO shall provide such results to stakeholders at Planning Advisory Committee meetings and solicit feedback based on the results.

### **17.8 Economic Studies Requested by Individual Stakeholders**

An individual stakeholder may request that the ISO conduct Economic Studies at the stakeholder's own expense to examine situations where potential regulated transmission solutions, market responses, or investments could result in (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of this OATT, (ii) reduced congestion, or (iii) the integration of new resources or loads, or both, on an aggregate or regional basis. The scope, assumptions, and deliverables shall be agreed to by the ISO and the stakeholder requesting the study. The notice and schedule initiating the Economic Study process described in Section 17.3 shall include the dates for submitting requests for studies under this Section 17.8.

The ISO may hire a consultant to conduct the analysis, and the entity requesting the study shall be responsible for the ISO's costs for study administration, study analysis, and consultants used to perform the study.

The ISO shall provide an estimated cost and duration to each stakeholder that requests an Economic Study. Each stakeholder that requests a study under this Section 17.8 shall provide written confirmation with the ISO that the stakeholder would like the ISO to proceed with conducting the study after receiving the estimated cost and duration for the study it requested.

The results from studies conducted pursuant to this Section 17.8 shall be used for informational purposes only. Any identified market efficiency issues resulting from studies conducted pursuant to this Section 17.8 shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

### **17.9 Cost Recovery**

The costs of the Economic Study process described in Sections 17.1 through 17.7 shall be recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff. The costs of Economic Studies performed by the ISO under Section 17.8 of this Attachment shall be paid for by the stakeholder requesting the study.

### **17.10 Coordination with PTOs**

The PTOs shall coordinate with the ISO in the performance of the Economic Study process pursuant to and as described in Section 5 of this Attachment.

**ATTACHMENT K APPENDIX 1**  
**ATTACHMENT K -LOCAL**  
**LOCAL SYSTEM PLANNING PROCESS**

**APPENDIX 1**  
**ATTACHMENT K -LOCAL**  
**LOCAL SYSTEM PLANNING PROCESS**

**1. Local System Planning Process**

**1.1 General**

In circumstances where transmission system planning for Non-Pool Transmission Facilities (“Non-PTF”)<sup>1</sup>, including Local Public Policy Transmission Upgrades, is taking place in New England that is not incorporated into the RSP planning process, the following Local System Plan (“LSP”) process will be utilized for transmission planning purposes. The purpose of the LSP is to enable formal stakeholder input to planning for Non-PTF that is not incorporated into the RSP. The LSP shall ensure the opportunity for Planning Advisory Committee participation in the LSP process. The LSP will not be subject to approval by the ISO or the ISO Board under the RSP.

**1.2 Planning Advisory Committee Review**

The Planning Advisory Committee shall periodically provide input and feedback to the PTOs concerning the development of the LSP and the conduct of associated system enhancement and expansion studies. It is contemplated that LSP issues for identified local areas will be periodically addressed at the end of regularly scheduled Planning Advisory Committee meetings. Regular meetings of the Planning Advisory Committee shall be extended as necessary to serve the purposes of this section. Each PTO contemplating the addition of new Non-PTF will present its respective LSP to the Planning Advisory Committee not less than once per year. Not less than every three years, each PTO will post a notice as part of its LSP process indicating that members of the Planning Advisory Committee, NESCOE, or any state may provide the PTO with input regarding state and federal Public Policy Requirements identified as driving transmission needs relating to Non-PTF and regarding particular local transmission needs driven by Public Policy Requirements. The PTO will provide a written explanation, to be posted on the ISO website, of why suggested transmission needs driven by Public Policy Requirements will or will not be evaluated for potential solutions in the LSP planning process.

**1.3 Role of the PTOs**

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<sup>1</sup> For absence of doubt, the PTOs clarify that Non-PTF is meant to include Category B and Local Area Facilities as defined by the TOA.

Each PTO will be responsible for administering the LSP process pertaining to its own Non-PTF, including Local Public Policy Transmission Upgrades, by presenting LSP information to the Planning Advisory Committee, developing an appropriate needs analysis and addressing LSP needs within its local area. In developing its LSP, each PTO will ensure comparable treatment of similarly situated customers or potential customers and will take into consideration data, comments and specific requests supplied by the Planning Advisory Committee, Transmission Customers and other stakeholders. To the extent that generation and/or demand resources are identified that could impact planning for Non-PTF, each PTO will take such resources into account when developing the LSP for its facilities, consistent with Good Utility Practice. Each PTO will also be responsible for addressing issues or concerns arising out of Planning Advisory Committee review of its proposed LSP and posting its LSP and the LSP Project List.

#### **1.4 Description of LSP**

The LSP shall describe the projected improvements to Non-PTF that are needed to maintain system reliability or as Local Public Policy Transmission Upgrades, and shall reflect the results of such reviews within the limited geographical areas that pertain to the LSP, as determined by each PTO (“LSP Needs Assessments”), and corresponding system planning and expansion studies. The LSP Needs Assessments will be coordinated with the RSP and include the information that the ISO-NE incorporates into the RSP plans, as applicable. The proponents of regulated transmission proposals in response to LSP Needs Assessments shall also identify any RSP plans that require coordination with their regulated transmission proposals addressing the Non-PTF system needs.

The LSP shall identify the planning process, criteria, data, and assumptions used to develop the LSP. To the extent the current LSP utilizes data, assumptions or criteria used by the ISO in the RSP, any such data, assumptions or criteria will also be identified in the LSP.

Each PTO shall consult with NESCOE and applicable states, local authorities and stakeholders to consider their views prior to including a Local Public Transmission Upgrade in its LSP, as described in Section 1.6.

Each PTO’s LSP will be made available on a website for review by the Planning Advisory Committee, Transmission Customers and other stakeholders, subject to the ISO New England Information Policy and

CEII restrictions or requirements. The ISO's posting of the RSP and the RSP Project List will include links to each PTO's specific LSP posting.

The LSP of a particular PTO shall be posted not less than 3 business days prior to its presentation by the PTO to the Planning Advisory Committee. The Planning Advisory Committee, Transmission Customers, and other stakeholders will have 30 days from the date of the PTO's presentation to the Planning Advisory Committee to provide any written comments for consideration by the PTO. The LSP shall specify the physical characteristics of the solutions that can meet the needs identified in the LSP. The LSP shall provide sufficient information to allow Market Participants to assess the quantity, general locations and operating characteristics of the type of incremental supply or demand-side resources, or merchant transmission projects, that would satisfy the identified needs or that may serve to modify, offset or defer proposed regulated transmission upgrades.

Each year's LSP shall be based upon the LSP completed in the prior year by either recertifying the results of the prior LSP or providing specific updates.

## **1.5 Economic Studies**

To the extent that the ISO selects any Economic Studies pursuant to Section 4.1(b) of Attachment K or otherwise performs Economic Studies that will impact Non-PTF, the PTOs will coordinate with the ISO in the performance of such Economic Studies.

## **1.6 Public Policy Studies**

As part of the LSP process, each PTO will evaluate potential transmission solutions on its Non-PTF system that are likely to be both efficient and cost-effective for meeting Public Policy Requirements.

### **1.6A Process to Identify Public Policy Requirements Driving Non-PTF Transmission Needs**

Within six months of publication, each PTO will review the Public Policy Requirements posted by the ISO to determine and evaluate at a high level any public policy needs potentially driving transmission needs on their respective Non-PTF systems. Such evaluations will also include potential public policy needs suggested by third parties. Each PTO will review NESCOE's written explanation of which transmission needs driven by state or federal Public Policy Requirements will be evaluated by the ISO and why other suggested transmission needs will not be evaluated. If NESCOE does not provide a listing

of identified transmission needs and explanation, each PTO will review the ISO's explanations of which transmission needs driven by state or federal Public Policy Requirements will be evaluated by the ISO and why other suggested transmission needs will not be evaluated. In addition, each PTO will review the ISO's explanation of which transmission needs driven by local Public Policy Requirements will be evaluated in the regional system planning process and why other suggested transmission needs driven by local Public Policy requirements will not be evaluated. Each PTO will then determine if any of the posted state, federal or local Public Policy Requirements are driving a need on its Non-PTF transmission system and will include the non-PTF needs in its local planning process.

As part of the local planning process, each PTO will list the identified transmission needs on its non-PTF transmission system driven by state, federal, or local Public Policy Requirements that will be evaluated, and provide an explanation of why any identified transmission needs will not be evaluated as part of its LSP. The list will be posted in the PTO's LSP and presented at the annual PAC meeting. The PTO will seek input at the PAC meeting from stakeholders about whether further study is warranted to identify solutions for local transmission system needs and seek recommendations about whether to proceed with such studies. A stakeholder may provide written input on the list within 30 days from the date of presentation for consideration by the PTO. Each PTO will then confirm, or modify if appropriate, its determination of which identified transmission needs on its non-PTF transmission system driven by state, federal, or local Public Policy Requirements will be evaluated and which will not be evaluated, and revise its annual LSP accordingly. If the potential Non-PTF transmission needs identified would affect the Non-PTF facilities of more than one PTO, the affected PTOs will coordinate their efforts with other affected PTOs, as necessary.

#### **1.6B Procedure for Evaluating Potential Public Policy Solutions on the Non-PTF**

Once it has been determined that a non-PTF need driven by state, federal or local Public Policy Requirements will be evaluated, each PTO will prepare a scope and associated assumptions as part of a Public Policy Local Transmission Study. For those needs where a scope is available, a PTO may present the proposed scope for the Public Policy Local Transmission Study within its LSP and as part of its LSP presentation described in Section 1.6A. A stakeholder may provide written input to the scope within 30 days after the LSP presentation for the PTO to consider.

Each PTO will schedule a follow-up PAC meeting presentation for additional stakeholder input within 4 months after the PTO's LSP presentation as described in Section 1.6A if the proposed scope for a Public Policy Local Transmission Study was not included in its annual LSP presentation. Within 30 days after



the follow-up meeting, a stakeholder may provide written input to the scope for the PTO to consider. Subsequently, the PTO will determine the study scope for the Public Policy Local Transmission Study and revise its annual LSP.

In preparation of a Public Policy Local Transmission Study that will be presented to the PAC as part of the LSP for the following year, the PTO will undertake the following: First, the PTO will perform the initial phase of the Public Policy Local Transmission Study to develop an estimate of costs and benefits and post its preliminary results on a website. Second, the PTO will use good faith efforts to contact stakeholders and the appropriate state and/or local authorities informing them of the posting, requesting input on whether further study is warranted to identify solutions for local transmission system needs, and seeking recommendations about whether to proceed with further planning and construction of a Local Public Policy Transmission Upgrade. Each PTO will then make a determination of whether further study is warranted to identify solutions for local transmission system needs, or will select its final solution, and revise its annual LSP accordingly. If the potential Non-PTF transmission needs identified would affect the Non-PTF facilities of more than one PTO, the affected PTOs will coordinate their efforts with other affected PTOs, as necessary. Results of a Public Policy Local Transmission Study will be provided to the PAC as part of the LSP for the following year.

## **2. Posting of LSP Project List**

Each PTO shall develop, maintain and make available on a website, a cumulative listing of proposed regulated transmission solutions that may meet LSP needs (the “LSP Project List”). The LSP Project List will be updated at least annually. The LSP Project List shall also provide reasons for any new Non-PTF, including Local Public Policy Transmission Upgrades, any change in status of proposed Non-PTF, including Local Public Policy Transmission Upgrades, or any removal of proposed Non-PTF, including Local Public Policy Transmission Upgrades, from the LSP Project List. Each PTO will be individually responsible for publicly posting and updating the status of its respective LSP and the transmission projects arising therefrom on a website in a format comparable to the manner in which RSP plans and projects are posted on the RSP Project List. The ISO’s posting of the RSP and RSP Project List will include links to each PTO’s specific LSP Project List.

## **3. Posting of Assumptions and Criteria**

Each PTO will make available on a website the planning criteria and assumptions used in its current LSP. A link to each PTO’s planning criteria and assumptions will be posted on the ISO website.

#### **4. Cost Responsibility for Transmission Upgrades**

The cost responsibility for each upgrade, modification or addition to the transmission system in New England that is included in the LSP Project List of this Appendix 1 shall be determined in accordance with Schedule 21 of this OATT.

#### **5. LSP Dispute Resolution Procedures**

##### **5.1 Objective**

Section 5 of this Appendix 1 sets forth an LSP dispute resolution process (the "LSP Dispute Resolution Process") through which LSP-related transmission planning-related disputes may be resolved as expeditiously as possible.

##### **5.2 Confidential Information and CEII Protections**

All information disclosed in the course of the LSP Dispute Resolution Process shall be subject to the protection of confidential information and CEII consistent with the ISO New England Information Policy and CEII policy.

##### **5.3 Eligible Parties**

Any member of the Planning Advisory Committee that has been adversely affected by a PTO's Reviewable Determination with respect to the LSP transmission planning process described in this Appendix 1 is eligible to raise its dispute, as appropriate, under this LSP Dispute Resolution Process ("Disputing Party").

##### **5.4 Scope**

In order to ensure that the LSP transmission planning process set forth under this Appendix 1 moves expeditiously forward, the scope of issues that may be subject to the LSP Dispute Resolution Process under this Section 5 shall be limited to certain key procedural and substantive decisions made by the applicable PTO within its authority as specified in documents on file with the Commission. That is, decisions not subject to resolution within the jurisdiction of the Commission are not within the scope of this LSP Dispute Resolution Process. Examples of matters not within the scope of the LSP Dispute Resolution Process include planning to serve retail native load or state siting issues. Additionally, the

Tariff already explicitly provides specific dispute resolution procedures for various matters. To this end, any matter regarding the review and approval of applications pursuant to Section I.3.9 of the Tariff, which is subject to the dispute resolution process under Section I.6 of the Tariff, shall not be within the scope of this LSP Dispute Resolution Process. Similarly, any matter regarding Transmission Cost Allocation shall be governed by the dispute resolution process under Schedule 12 of the OATT, and shall be outside the scope of this LSP Dispute Resolution Process.

**(a) Reviewable Determinations:**

The LSP determinations made by the applicable PTO that may be subject to the LSP Dispute Resolution Process under this Section 5 ("Reviewable LSP Determination") shall include certain procedural and substantive challenges at designated key decision points during the LSP transmission planning process for Non-PTF, including Local Public Policy Transmission Upgrades ("Key LSP Decision Points"). Procedural challenges will be limited to whether or not the steps taken up to a Key LSP Decision Point conform to the requirements set forth in this Appendix 1. Substantive challenges will be limited to whether or not a determination or conclusion rendered at a Key LSP Decision Point was supported by adequate basis in fact. The Key LSP Decision Points shall be limited to the following:

- (i) Results of an LSP Needs Assessment conducted and communicated by a PTO to the Planning Advisory Committee as specified in this Appendix 1;
- (ii) Updates to the LSP Project List, including adding, removing or revising regulated Non-PTF transmission solutions included thereunder, as presented at the Planning Advisory Committee and as specified in this Appendix 1;
- (iii) Results of Non-PTF transmission solutions studies, including any Local Public Policy Transmission Upgrade studies, conducted and communicated by the PTO to the Planning Advisory Committee as specified in this Appendix 1; and
- (iv) Consideration of market responses in LSP Needs Assessments as specified in this Appendix 1.

### **(b) Material Adverse Impact**

In order to prevail in a challenge to a procedural-based Reviewable LSP Determination, the Disputing Party must show that the alleged procedural error had a material adverse impact on the determination or conclusion made by the applicable PTO. In order to prevail in a challenge to a substantive-based Reviewable LSP Determination, the Disputing Party must show that either (i) the determination is based on incorrect data or assumptions or (ii) incorrect analysis was performed by the PTO, and (iii) as a result thereof, the PTO made an incorrect decision or determination.

## **5.5 Notice and Comment**

A Disputing Party aggrieved by a PTO's Reviewable LSP Determination shall have fifteen (15) calendar days upon learning of the Reviewable LSP Determination following the PTO's presentation of such LSP Reviewable Determination at the Planning Advisory Committee to request dispute resolution by giving notice to the Applicable PTO ("Request for LSP Dispute Resolution").

A Request for LSP Dispute Resolution shall be in writing and shall be provided to the applicable PTO and, as appropriate, other affected Transmission Owners. Within three (3) Business Days of the receipt by a PTO of a Request for Dispute Resolution, the PTO, in coordination with the ISO, shall prepare and distribute to all members of the Planning Advisory Committee a notice of the Request for Dispute Resolution including, subject to the protection of Confidential Information and CEII, the specifics of the Request for Dispute Resolution and providing the name of a PTO representative to whom any comments may be sent. Any member of the Planning Advisory Committee may submit to the PTO's designated representative, on or before the tenth (10th) Business Day following the date the PTO distributes the notice of the Request for Dispute Resolution, written comments to the PTO with respect to the Request for Dispute Resolution. The Disputing Party filing the Request for Dispute Resolution may respond to any such comments by submitting a written response to the PTO's designated representative and to the commenting party on or before the fifteenth (15th) Business Day following the date the PTO distributes the notice of the Request for Dispute Resolution. The PTO may, but is not required to, consider any written comments.

## **5.6 Dispute Resolution Procedure**

### **(a) Resolution Through the Planning Advisory Committee**

The Planning Advisory Committee shall discuss and resolve any LSP related dispute arising under this Appendix 1 involving a Reviewable LSP Determination, as defined in Section 5.4 of this Appendix 1, between and among the applicable PTO, the Disputing Party, and, as appropriate, other affected Transmission Owners and the ISO (collectively, “Parties”) (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution).

**(b) Resolution Through Informal Negotiation**

To the extent that the Planning Advisory Committee is not able to resolve a dispute arising under this Appendix 1 involving a Reviewable LSP Determination, as defined in Section 5.4 of this Appendix 1, between and among the Parties, such dispute shall be the subject of good-faith negotiations among the Parties. Each Party shall designate a fully authorized senior representative for resolution on an informal basis as promptly as practicable.

**(c) Resolution Through Alternative Dispute Resolution**

In the event the designated representatives are unable to resolve the dispute through informal negotiations within thirty (30) days, or such other period as the Parties may agree upon, by mutual agreement of the Parties, such LSP related dispute may be submitted to mediation or any other form of alternative dispute resolution upon the agreement of all Parties to participate in such mediation or other alternative dispute resolution process. Such form of alternative dispute resolution shall not include binding arbitration.

If a Party identifies exigent circumstances reasonably requiring expedited resolution of the LSP related dispute, such Party may file a Complaint with the Commission or seek other appropriate redress before a court of competent jurisdiction

**5.7 Notice of Results of Dispute Resolution**

Within three (3) Business Days following the resolution of a dispute pursuant to either Section 5.6(b) or 5.6(c) of this Appendix 1, the PTO shall distribute to members of the Planning Advisory Committee a document reflecting the resolution.

**5.8 Rights under the Federal Power Act:**

Nothing in this Appendix 1 shall restrict the rights of any party to file a complaint with the Commission under relevant provisions of the Federal Power Act.

**ATTACHMENT K APPENDIX 2**  
**LIST OF ENTITIES ENROLLED IN THE TRANSMISSION PLANNING REGION**  
**ENTITIES**

## **APPENDIX 2**

### **ATTACHMENT K**

#### **LIST OF ENTITIES ENROLLED IN THE TRANSMISSION PLANNING REGION**

The entities listed in this Appendix 2 are those enrolled for the purpose of participating as a transmission provider in the New England transmission planning region pursuant to Attachment K as of the date the revisions to this Appendix 2 were filed with the Commission. The most current list of entities enrolled for the purpose of participating as a transmission provider in the New England transmission planning region pursuant to Attachment K is available on the ISO-NE website. This Appendix 2 will be updated to reflect any subsequent enrollments as part of unrelated OATT filings at the time ISO-NE undertakes such unrelated filings.

Town of Braintree Electric Light Department

Central Maine Power Company

The City of Chicopee Municipal Lighting Department

The City of Holyoke Gas and Electric Department

The Connecticut Light and Power Company

Connecticut Municipal Electric Energy Cooperative

Connecticut Transmission Municipal Electric Energy Cooperative

Cross-Sound Cable Company, LLC

Emera Maine

Fitchburg Gas and Electric Light Company

Green Mountain Power Corporation

Hudson Light & Power Department

Massachusetts Municipal Wholesale Electric Company

Maine Electric Power Company

Middleborough Gas and Electric Department

New England Electric Transmission Corporation

New England Energy Connection, LLC

New England Hydro-Transmission Corporation



New England Hydro-Transmission Electric Company Inc.

New England Power Company

New Hampshire Electric Cooperative, Inc.

New Hampshire Transmission, LLC

Eversource Energy Service Company as agent for: The Connecticut Light and Power Company, NSTAR Electric Company, Public Service Company of New Hampshire, and Western Massachusetts Electric Company

Norwood Municipal Light Department

NSTAR Electric Company

Public Service Company of New Hampshire

Shrewsbury Electric & Cable Operations

Taunton Municipal Lighting Plant

Town of Reading Municipal Light Department

The United Illuminating Company

Unitil Energy Systems, Inc.

Vermont Electric Cooperative, Inc.

Vermont Electric Power Company, Inc.

Vermont Electric Transmission Company

Vermont Public Power Supply Authority

Vermont Transco LLC

Town of Wallingford CT Dept of Public Utilities – Electric Division

Western Massachusetts Electric Company

## **ATTACHMENT K APPENDIX 3**

### **LIST OF QUALIFIED TRANSMISSION PROJECT SPONSORS**

The entities listed in this Appendix 3 are those approved by ISO-NE as Qualified Transmission Project Sponsors as of the date the revisions to this Appendix 3 were filed with the Commission. The most current list of entities approved as Qualified Transmission Project Sponsors is available on the ISO-NE website. This Appendix 3 will be updated to reflect any subsequent enrollments as part of unrelated OATT filings at the time ISO-NE undertakes such unrelated filings.

Braintree Electric Light Department

Central Maine Power Company

City of Holyoke Gas and Electric Department

The Connecticut Light and Power Company

The Connecticut Transmission Municipal Electric Cooperative

Emera Maine

Eversource Energy Transmission Ventures, Inc.

Grid America Holdings, Inc.

Hudson Light and Power Department

Maine Electric Power Company

Middleboro Gas & Electric Department

New England Energy Connection, LLC

New England Power Company

New Hampshire Transmission, LLC

Norwood Municipal Light Department

NSTAR Electric Company

Public Service Company of New Hampshire

Taunton Municipal Light Plant

United Illuminating Company

Vermont Transco, LLC

Western Massachusetts Electric Company

## **I.2 Rules of Construction; Definitions**

### **I.2.1 Rules of Construction:**

In this Tariff, unless otherwise provided herein:

- (a) words denoting the singular include the plural and vice versa;
- (b) words denoting a gender include all genders;
- (c) references to a particular part, clause, section, paragraph, article, exhibit, schedule, appendix or other attachment shall be a reference to a part, clause, section, paragraph, or article of, or an exhibit, schedule, appendix or other attachment to, this Tariff;
- (d) the exhibits, schedules and appendices attached hereto are incorporated herein by reference and shall be construed with an as an integral part of this Tariff to the same extent as if they were set forth verbatim herein;
- (e) a reference to any statute, regulation, proclamation, ordinance or law includes all statutes, regulations, proclamations, amendments, ordinances or laws varying, consolidating or replacing the same from time to time, and a reference to a statute includes all regulations, policies, protocols, codes, proclamations and ordinances issued or otherwise applicable under that statute unless, in any such case, otherwise expressly provided in any such statute or in this Tariff;
- (f) a reference to a particular section, paragraph or other part of a particular statute shall be deemed to be a reference to any other section, paragraph or other part substituted therefor from time to time;
- (g) a definition of or reference to any document, instrument or agreement includes any amendment or supplement to, or restatement, replacement, modification or novation of, any such document, instrument or agreement unless otherwise specified in such definition or in the context in which such reference is used;
- (h) a reference to any person (as hereinafter defined) includes such person's successors and permitted assigns in that designated capacity;
- (i) any reference to "days" shall mean calendar days unless "Business Days" (as hereinafter defined) are expressly specified;
- (j) if the date as of which any right, option or election is exercisable, or the date upon which any amount is due and payable, is stated to be on a date or day that is not a Business Day, such right, option or election may be exercised, and such amount shall be deemed due and payable, on the next succeeding Business Day with the same effect as if the same was exercised or made on such date or day (without, in the case of any such payment, the payment or accrual of any interest or

other late payment or charge, provided such payment is made on such next succeeding Business Day);

- (k) words such as “hereunder,” “hereto,” “hereof” and “herein” and other words of similar import shall, unless the context requires otherwise, refer to this Tariff as a whole and not to any particular article, section, subsection, paragraph or clause hereof; and a reference to “include” or “including” means including without limiting the generality of any description preceding such term, and for purposes hereof the rule of *ejusdem generis* shall not be applicable to limit a general statement, followed by or referable to an enumeration of specific matters, to matters similar to those specifically mentioned.

### **I.2.2. Definitions:**

In this Tariff, the terms listed in this section shall be defined as described below:

**Active Demand Capacity Resource** is one or more Demand Response Resources located within the same Dispatch Zone, that is registered with the ISO, assigned a unique resource identification number by the ISO, and participates in the Forward Capacity Market to fulfill a Market Participant’s Capacity Supply Obligation pursuant to Section III.13 of Market Rule 1.

**Actual Capacity Provided** is the measure of capacity provided during a Capacity Scarcity Condition, as described in Section III.13.7.2.2 of Market Rule 1.

**Actual Load** is the consumption at the Retail Delivery Point for the hour.

**Additional Resource Blackstart O&M Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Additional Resource Specified-Term Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Additional Resource Standard Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Administrative Costs** are those costs incurred in connection with the review of Applications for transmission service and the carrying out of System Impact Studies and Facilities Studies.

**Administrative Export De-List Bid** is a bid that may be submitted in a Forward Capacity Auction by certain Existing Generating Capacity Resources subject to a multi-year contract to sell capacity outside of the New England Control Area during the associated Capacity Commitment Period, as described in Section III.13.1.2.3.1.4 of Market Rule 1.

**ADR Neutrals** are one or more firms or individuals identified by the ISO with the advice and consent of the Participants Committee that are prepared to act as neutrals in ADR proceedings under Appendix D to Market Rule 1.

**Advance** is defined in Section IV.A.3.2 of the Tariff.

**Affected Party**, for purposes of the ISO New England Billing Policy, is defined in Section 6.3.5 of the ISO New England Billing Policy.

**Affiliate** is any person or entity that controls, is controlled by, or is under common control by another person or entity. For purposes of this definition, "control" means the possession, directly or indirectly, of the authority to direct the management or policies of an entity. A voting interest of ten percent or more shall create a rebuttable presumption of control.

**AGC** is automatic generation control.

**AGC SetPoint** is the desired output signal for a Resource providing Regulation that is produced by the AGC system as frequently as every four seconds.

**AGC SetPoint Deadband** is a deadband expressed in megawatts that is applied to changing values of the AGC SetPoint for generating units.

**Allocated Assessment** is a Covered Entity's right to seek and obtain payment and recovery of its share in any shortfall payments under Section 3.3 or Section 3.4 of the ISO New England Billing Policy.

**Alternative Dispute Resolution (ADR)** is the procedure set forth in Appendix D to Market Rule 1.

**Alternative Technology Regulation Resource (ATRR)** is one or more facilities capable of providing Regulation that have been registered in accordance with the Asset Registration Process. An Alternative Technology Regulation Resource is eligible to participate in the Regulation Market.

**Ancillary Services** are those services that are necessary to support the transmission of electric capacity and energy from resources to loads while maintaining reliable operation of the New England Transmission System in accordance with Good Utility Practice.

**Announced Schedule 1 EA Amount, Announced Schedule 2 EA Amount, Announced Schedule 3 EA Amount** are defined in Section IV.B.2.2 of the Tariff.

**Annual Transmission Revenue Requirements** are the annual revenue requirements of a PTO's PTF or of all PTOs' PTF for purposes of the OATT shall be the amount determined in accordance with Attachment F to the OATT.

**Annual Reconfiguration Transaction** is a bilateral transaction that may be used in accordance with Section III.13.5.4 of Market Rule 1 to specify a price when a Capacity Supply Obligation is transferred using supply offers and demand bids in Annual Reconfiguration Auctions.

**Applicants**, for the purposes of the ISO New England Financial Assurance Policy, are entities applying for Market Participant status or for transmission service from the ISO.

**Application** is a written request by an Eligible Customer for transmission service pursuant to the provisions of the OATT.

**Asset** is a Generator Asset, a Demand Response Asset, a component of an On-Peak Demand Resource or Seasonal Peak Demand Resource, a Load Asset (including an Asset Related Demand), an Alternative Technology Regulation Resource, or a Tie-Line Asset.

**Asset Registration Process** is the ISO business process for registering an Asset.

**Asset Related Demand** is a Load Asset that has been discretely modeled within the ISO's dispatch and settlement systems, settles at a Node, has been registered in accordance with the Asset Registration Process, and is made up of either: (1) one or more individual end-use metered customers receiving service

from the same point or points of electrical supply with an aggregate average hourly load of 1 MW or greater during the 12 months preceding its registration or (2) one or more storage facilities with an aggregate consumption capability of at least 1 MW.

**Asset Related Demand Bid Block-Hours** are Block-Hours assigned to the Lead Market Participant for each Asset Related Demand bid. Blocks of the bid in effect for each hour will be totaled to determine the daily quantity of Asset Related Demand Bid Block-Hours. In the case that a Resource has a Real-Time unit status of “unavailable” for an entire day, that day will not contribute to the quantity of Asset Related Demand Bid Block-Hours. However, if the Resource has at least one hour of the day with a unit status of “available,” the entire day will contribute to the quantity of Asset Related Demand Bid Block-Hours.

**Asset-Specific Going Forward Costs** are the net costs of an asset that is part of an Existing Generating Capacity Resource, calculated for the asset in the same manner as the net costs of Existing Generating Capacity Resources as described in Section III.13.1.2.3.2.1.1.1 (for an asset with a Static De-List Bid or an Export Bid) or Section III.13.1.2.3.2.1.1.2 (for an asset with a Permanent De-List Bid or Retirement De-List Bid).

**Assigned Meter Reader** reports to the ISO the hourly and monthly MWh associated with the Asset. These MWh are used for settlement. The Assigned Meter Reader may designate an agent to help fulfill its Assigned Meter Reader responsibilities; however, the Assigned Meter Reader remains functionally responsible to the ISO.

**Auction Revenue Right (ARR)** is a right to receive FTR Auction Revenues in accordance with Appendix C of Market Rule 1.

**Auction Revenue Right Allocation (ARR Allocation)** is defined in Section 1 of Appendix C of Market Rule 1.

**Auction Revenue Right Holder (ARR Holder)** is an entity which is the record holder of an Auction Revenue Right (excluding an Incremental ARR) in the register maintained by the ISO.

**Authorized Commission** is defined in Section 3.3 of the ISO New England Information Policy.

**Authorized Person** is defined in Section 3.3 of the ISO New England Information Policy.



**Automatic Response Rate** is the response rate, in MW/Minute, at which a Market Participant is willing to have a Regulation Resource change its output or consumption while providing Regulation between the Regulation High Limit and Regulation Low Limit.

**Average Hourly Load Reduction** is either: (i) the sum of the On-Peak Demand Resource's electrical energy reduction during Demand Resource On-Peak Hours in the month divided by the number of Demand Resource On-Peak Hours in the month; or (ii) the sum of the Seasonal Peak Demand Resource's electrical energy reduction during Demand Resource Seasonal Peak Hours in the month divided by the number of Demand Resource Seasonal Peak Hours in the month. The On-Peak Demand Resource's or Seasonal Peak Demand Resource's electrical energy reduction and Average Hourly Load Reduction shall be determined consistent with the resource's Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements, as described in Section III.13.1.4.3 of Market Rule 1 and the ISO New England Manuals.

**Average Hourly Output** is either: (i) the sum of the On-Peak Demand Resource's electrical energy output during Demand Resource On-Peak Hours in the month divided by the number of Demand Resource On-Peak Hours in the month; or (ii) the sum of the Seasonal Peak Demand Resource's electrical energy output during Demand Resource Seasonal Peak Hours in the month divided by the number of Demand Resource Seasonal Peak Hours in the month. Electrical energy output and Average Hourly Output shall be determined consistent with the resource's Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements, as described in Section III.13.1.4.3 of Market Rule 1 and the ISO New England Manuals.

**Backstop Transmission Solution** is a solution proposed: (i) to address a reliability or market efficiency need identified by the ISO in a Needs Assessment reported by the ISO pursuant to Section 4.1(i) of Attachment K to the ISO OATT, (ii) by the PTO or PTOs with an obligation under Schedule 3.09(a) of the TOA to address the identified need; and (iii) in circumstances in which the competitive solution process specified in Section 4.3 of Attachment K to the ISO OATT will be utilized.

**Bankruptcy Code** is the United States Bankruptcy Code.

**Bankruptcy Event** occurs when a Covered Entity files a voluntary or involuntary petition in bankruptcy or commences a proceeding under the United States Bankruptcy Code or any other applicable law concerning insolvency, reorganization or bankruptcy by or against such Covered Entity as debtor.

**Benchmark Scenario** is an Economic Study reference scenario that is described in Section 17.2(a) of Attachment K to the OATT.

**Bilateral Contract (BC)** is any of the following types of contracts: Internal Bilateral for Load, Internal Bilateral for Market for Energy, and External Transactions.

**Bilateral Contract Block-Hours** are Block-Hours assigned to the seller and purchaser of an Internal Bilateral for Load, Internal Bilateral for Market for Energy and External Transactions; provided, however, that only those contracts which apply to the Real-Time Energy Market will accrue Block-Hours.

**Binary Storage DARD** is a DARD that participates in the New England Markets as part of a Binary Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Binary Storage Facility** is a type of Electric Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Blackstart Capability Test** is the test, required by ISO New England Operating Documents, of a resource's capability to provide Blackstart Service.

**Blackstart Capital Payment** is the annual compensation, as calculated pursuant to Section 5.1, or as referred to in Section 5.2, of Schedule 16 to the OATT, for a Designated Blackstart Resource's Blackstart Equipment capital costs associated with the provision of Blackstart Service (excluding the capital costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Blackstart Equipment** is any equipment that is solely necessary to enable the Designated Blackstart Resource to provide Blackstart Service and is not required to provide other products or services under the Tariff.

**Blackstart O&M Payment** is the annual Blackstart O&M compensation calculated under either Section 5.1 or 5.2 of Schedule 16 of the OATT, as applicable.

**Blackstart Owner** is the Market Participant who is authorized on behalf of the Generator Owner(s) to offer or operate the resource as a Designated Blackstart Resource and is authorized to commit the resource to provide Blackstart Service.

**Blackstart Service** is the Ancillary Service described in Section II.47 of the Tariff and Schedule 16 of the OATT.

**Blackstart Service Commitment** is the commitment by a Blackstart Owner for its resource to provide Blackstart Service and the acceptance of that commitment by the ISO, in the manner detailed in ISO New England Operating Procedure No. 11 – Designated Blackstart Resource Administration (OP 11), and which includes a commitment to provide Blackstart Service established under Operating Procedure 11 – Designated Blackstart Resource Administration (OP11).

**Blackstart Service Minimum Criteria** are the minimum criteria that a Blackstart Owner and its resource must meet in order to establish and maintain a resource as a Designated Blackstart Resource.

**Blackstart Standard Rate Payment** is the formulaic rate of monthly compensation, as calculated pursuant to Section 5 of Schedule 16 to the OATT, paid to a Blackstart Owner for the provision of Blackstart Service from a Designated Blackstart Resource.

**Blackstart Station** is comprised of (i) a single Designated Blackstart Resource or (ii) two or more Designated Blackstart Resources that share Blackstart Equipment.

**Blackstart Station-specific Rate Payment** is the Commission-approved compensation, as calculated pursuant to Section 5.2 of Schedule 16 to the OATT, paid to a Blackstart Owner on a monthly basis for the provision of Blackstart Service by Designated Blackstart Resources located at a specific Blackstart Station.

**Blackstart Station-specific Rate Capital Payment** is a component of the Blackstart Station-specific Rate Payment that reflects a Blackstart Station's capital Blackstart Equipment costs associated with the

provision of Blackstart Service (excluding the capital costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Block** is defined as follows: (1) With respect to Bilateral Contracts, a Bilateral Contract administered by the ISO for an hour; (2) with respect to Supply Offers administered by the ISO, a quantity with a related price for Energy (Supply Offers for Energy may contain multiple sets of quantity and price pairs for each hour); (3) with respect to Demand Bids administered by the ISO, a quantity with a related price for Energy (Demand Bids for Energy may contain multiple sets of quantity and price pairs for each hour); (4) with respect to Increment Offers administered by the ISO, a quantity with a related price for Energy (Increment Offers for Energy may contain multiple sets of quantity and price pairs for each hour); (5) with respect to Decrement Bids administered by the ISO, a quantity with a related price for Energy (Decrement Bids for Energy may contain multiple sets of quantity and price pairs for each hour); (6) with respect to Asset Related Demand bids administered by the ISO, a quantity with a related price for Energy (Asset Related Demand bids may contain multiple sets of quantity and price pairs for each hour); and (7) with respect to Demand Reduction Offers administered by the ISO, a quantity of reduced demand with a related price (Demand Reduction Offers may contain multiple sets of quantity and price pairs for the day).

**Block-Hours** are the number of Blocks administered for a particular hour.

**Budget and Finance Subcommittee** is a subcommittee of the Participants Committee, the responsibilities of which are specified in Section 8.4 of the Participants Agreement.

**Business Day** is any day other than a Saturday or Sunday or ISO holidays as posted by the ISO on its website.

**Cancelled Start NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Capability Demonstration Year** is the one year period from September 1 through August 31.

**Capacity Acquiring Resource** is a resource that is seeking to acquire a Capacity Supply Obligation through: (1) a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1, or; (2) an annual or monthly reconfiguration auction, as described in Section III.13.4.

**Capacity Balancing Ratio** is a ratio used in calculating the Capacity Performance Payment in the Forward Capacity Market, as described in Section III.13.7.2.3 of Market Rule 1.

**Capacity Base Payment** is the portion of revenue received in the Forward Capacity Market as described in Section III.13.7.1 of Market Rule 1.

**Capacity Capability Interconnection Standard** has the meaning specified in Schedule 22, Schedule 23, and Schedule 25 of the OATT.

**Capacity Clearing Price** is the clearing price for a Capacity Zone for a Capacity Commitment Period resulting from the Forward Capacity Auction conducted for that Capacity Commitment Period, as determined in accordance with Section III.13.2.7 of Market Rule 1.

**Capacity Commitment Period** is the one-year period from June 1 through May 31 for which obligations are assumed and payments are made in the Forward Capacity Market.

**Capacity Cost (CC)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**Capacity Export Through Import Constrained Zone Transaction** is defined in Section III.1.10.7(f)(i) of Market Rule 1.

**Capacity Load Obligation** is the quantity of capacity for which a Market Participant is financially responsible as described in Section III.13.7.5.2 of Market Rule 1.

**Capacity Load Obligation Acquiring Participant** is a load serving entity or any other Market Participant seeking to acquire a Capacity Load Obligation through a Capacity Load Obligation Bilateral, as described in Section III.13.5.2 of Market Rule 1.

**Capacity Network Import Capability (CNI Capability)** is as defined in Section I of Schedule 25 of the OATT.

**Capacity Network Import Interconnection Service (CNI Interconnection Service)** is as defined in Section I of Schedule 25 of the OATT.

**Capacity Load Obligation Bilateral** is a bilateral contract through which a Market Participant may transfer all or a portion of its Capacity Load Obligation to another entity, as described in Section III.13.5 of Market Rule 1.

**Capacity Load Obligation Transferring Participant** is an entity that has a Capacity Load Obligation and is seeking to shed such obligation through a Capacity Load Obligation Bilateral, as described in Section III.13.5.2 of Market Rule 1.

**Capacity Network Resource (CNR)** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**Capacity Network Resource Interconnection Service (CNR Interconnection Service)** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**Capacity Performance Bilateral** is a transaction for transferring Capacity Performance Score, as described in Section III.13.5.3 of Market Rule 1.

**Capacity Performance Payment** is the performance-dependent portion of revenue received in the Forward Capacity Market, as described in Section III.13.7.2 of Market Rule 1.

**Capacity Performance Payment Rate** is a rate used in calculating Capacity Performance Payments, as described in Section III.13.7.2.5 of Market Rule 1.

**Capacity Performance Score** is a figure used in determining Capacity Performance Payments, as described in Section III.13.7.2.4 of Market Rule 1.

**Capacity Rationing Rule** addresses whether offers and bids in a Forward Capacity Auction may be rationed, as described in Section III.13.2.6 of Market Rule 1.

**Capacity Scarcity Condition** is a period during which performance is measured in the Forward Capacity Market, as described in Section III.13.7.2.1 of Market Rule 1.

**Capacity Scarcity Condition** is a period during which performance is measured in the Forward Capacity Market, as described in Section III.13.7.2.1 of Market Rule 1.

**Capacity Supply Obligation** is an obligation to provide capacity from a resource, or a portion thereof, to satisfy a portion of the Installed Capacity Requirement that is acquired through a Forward Capacity Auction in accordance with Section III.13.2, a reconfiguration auction in accordance with Section III.13.4, or a Capacity Supply Obligation Bilateral in accordance with Section III.13.5.1 of Market Rule 1.

**Capacity Supply Obligation Bilateral** is a bilateral contract through which a Market Participant may transfer all or a part of its Capacity Supply Obligation to another entity, as described in Section III.13.5.1 of Market Rule 1.

**Capacity Transfer Rights (CTRs)** are calculated in accordance with Section III.13.7.5.4.

**Capacity Transferring Resource** is a resource that has a Capacity Supply Obligation and is seeking to shed such obligation, or a portion thereof, through: (1) a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1, or; (2) an annual or monthly reconfiguration auction, as described in Section III.13.4.

**Capacity Zone** is a geographic sub-region of the New England Control Area as determined in accordance with Section III.12.4 of Market Rule 1.

**Capacity Zone Demand Curves** are the demand curves used in the Forward Capacity Market for a Capacity Zone as specified in Sections III.13.2.2.2 and III.13.2.2.3.

**Capital Funding Charge (CFC)** is defined in Section IV.B.2 of the Tariff.

**CARL Data** is Control Area reliability data submitted to the ISO to permit an assessment of the ability of an external Control Area to provide energy to the New England Control Area in support of capacity offered to the New England Control Area by that external Control Area.

**Category B Designated Blackstart Resource** has the same meaning as Designated Blackstart Resource.

**Charge** is a sum of money due from a Covered Entity to the ISO, either in its individual capacity or as billing and collection agent for NEPOOL pursuant to the Participants Agreement.

**CLAIM10** is the value, expressed in megawatts, calculated pursuant to Section III.9.5.3 of the Tariff.

**CLAIM30** is the value, expressed in megawatts, calculated pursuant to Section III.9.5.3 of the Tariff.

**Claimed Capability Audit** is performed to determine the real power output capability of a Generator Asset or the demand reduction capability of a Demand Response Resource.

**Cluster Enabling Transmission Upgrade (CETU)** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Cluster Enabling Transmission Upgrade Regional Planning Study (CRPS)** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Cluster Entry Deadline** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Cluster Interconnection System Impact Study (CSIS)** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Clustering** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**CNR Capability** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**Coincident Peak Contribution** is a Market Participant's share of the New England Control Area coincident peak demand for the prior calendar year as determined prior to the start of each Capacity Commitment Period, which reflects the sum of the prior year's annual coincident peak contributions of the customers served by the Market Participant at each Load Asset. Daily Coincident Peak Contribution values shall be submitted by the Assigned Meter Reader or Host Participant by the meter reading deadline to the ISO.



**Commercial Capacity** is capacity that has achieved FCM Commercial Operation.

**Commission** is the Federal Energy Regulatory Commission.

**Commitment Period** is (i) for a Day-Ahead Energy Market commitment, a period of one or more contiguous hours for which a Resource is cleared in the Day-Ahead Energy Market, and (ii) for a Real-Time Energy Market commitment, the period of time for which the ISO indicates the Resource is being committed when it issues the Dispatch Instruction. If the ISO does not indicate the period of time for which the Resource is being committed in the Real-Time Energy Market, then the Commitment Period is the Minimum Run Time for an offline Resource and one hour for an online Resource.

**Common Costs** are those costs associated with a Station that are avoided only by the clearing of the Static De-List Bids, the Permanent De-List Bids, or the Retirement De-List Bids of all the Existing Generating Capacity Resources comprising the Station.

**Completed Application** is an Application that satisfies all of the information and other requirements of the OATT, including any required deposit.

**Compliance Effective Date** is the date upon which the changes in the predecessor NEPOOL Open Access Transmission Tariff which have been reflected herein to comply with the Commission's Order of April 20, 1998 became effective.

**Composite FCM Transaction** is a transaction for separate resources seeking to participate as a single composite resource in a Forward Capacity Auction in which multiple Designated FCM Participants provide capacity, as described in Section III.13.1.5 of Market Rule 1.

**Conditional Qualified New Resource** is defined in Section III.13.1.1.2.3(f) of Market Rule 1.

**Confidential Information** is defined in Section 2.1 of the ISO New England Information Policy, which is Attachment D to the Tariff.

**Confidentiality Agreement** is Attachment 1 to the ISO New England Billing Policy.

**Congestion** is a condition of the New England Transmission System in which transmission limitations prevent unconstrained regional economic dispatch of the power system. Congestion is the condition that results in the Congestion Component of the Locational Marginal Price at one Location being different from the Congestion Component of the Locational Marginal Price at another Location during any given hour of the dispatch day in the Day-Ahead Energy Market or Real-Time Energy Market.

**Congestion Component** is the component of the nodal price that reflects the marginal cost of congestion at a given Node or External Node relative to the reference point. When used in connection with Zonal Price and Hub Price, the term Congestion Component refers to the Congestion Components of the nodal prices that comprise the Zonal Price and Hub Price weighted and averaged in the same way that nodal prices are weighted to determine Zonal Price and averaged to determine the Hub Price.

**Congestion Cost** is the cost of congestion as measured by the difference between the Congestion Components of the Locational Marginal Prices at different Locations and/or Reliability Regions on the New England Transmission System.

**Congestion Paying LSE** is, for the purpose of the allocation of FTR Auction Revenues to ARR Holders as provided for in Appendix C of Market Rule 1, a Market Participant or Non-Market Participant Transmission Customer that is responsible for paying for Congestion Costs as a Transmission Customer paying for Regional Network Service under the Transmission, Markets and Services Tariff, unless such Transmission Customer has transferred its obligation to supply load in accordance with ISO New England System Rules, in which case the Congestion Paying LSE shall be the Market Participant supplying the transferred load obligation. The term Congestion Paying LSE shall be deemed to include, but not be limited to, the seller of internal bilateral transactions that transfer Real-Time Load Obligations under the ISO New England System Rules.

**Congestion Revenue Fund** is the amount available for payment of target allocations to FTR Holders from the collection of Congestion Cost.

**Congestion Shortfall** means congestion payments exceed congestion charges during the billing process in any billing period.

**Continuous Storage ATRR** is an ATRR that participates in the New England Markets as part of a Continuous Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Continuous Storage DARD** is a DARD that participates in the New England Markets as part of a Continuous Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Continuous Storage Generator Asset** is a Generator Asset that participates in the New England Markets as part of a Continuous Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Continuous Storage Facility** is a type of Electric Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Control Agreement** is the document posted on the ISO website that is required if a Market Participant's cash collateral is to be invested in BlackRock funds.

**Control Area** is an electric power system or combination of electric power systems to which a common automatic generation control scheme is applied in order to:

- (1) match, at all times, the power output of the generators within the electric power system(s) and capacity and energy purchased from entities outside the electric power system(s), with the load within the electric power system(s);
- (2) maintain scheduled interchange with other Control Areas, within the limits of Good Utility Practice;
- (3) maintain the frequency of the electric power system(s) within reasonable limits in accordance with Good Utility Practice and the criteria of the applicable regional reliability council or the North American Electric Reliability Corporation; and
- (4) provide sufficient generating capacity to maintain operating reserves in accordance with Good Utility Practice.

**Controllable Behind-the-Meter Generation** means generation whose output can be controlled located at the same facility as a DARD or a Demand Response Asset, excluding: (1) generators whose output is separately metered and reported and (2) generators that cannot operate electrically synchronized to, and that are operated only when the facility loses its supply of power from, the New England Transmission System, or when undergoing related testing.

**Coordinated External Transaction** is an External Transaction at an external interface for which the enhanced scheduling procedures in Section III.1.10.7.A are implemented. A transaction to wheel energy into, out of or through the New England Control Area is not a Coordinated External Transaction.

**Coordinated Transaction Scheduling** means the enhanced scheduling procedures set forth in Section III.1.10.7.A.

**Correction Limit** means the date that is one hundred and one (101) calendar days from the last Operating Day of the month to which the data applied. As described in Section III.3.6.1 of Market Rule 1, this will be the period during which meter data corrections must be submitted unless they qualify for submission as a Requested Billing Adjustment under Section III.3.7 of Market Rule 1.

**Cost of Energy Consumed (CEC)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**Cost of Energy Produced (CEP)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**Cost of New Entry (CONE)** is the estimated cost of new entry (\$/kW-month) for a capacity resource that is determined by the ISO for each Forward Capacity Auction pursuant to Section III.13.2.4.

**Counterparty** means the status in which the ISO acts as the contracting party, in its name and own right and not as an agent, to an agreement or transaction with a Customer (including assignments involving Customers) involving sale to the ISO, and/or purchase from the ISO, of Regional Transmission Service and market and other products and services, and other transactions and assignments involving Customers, all as described in the Tariff.

**Covered Entity** is defined in the ISO New England Billing Policy.

**Credit Coverage** is third-party credit protection obtained by the ISO in the form of credit insurance coverage.

**Credit Qualifying** means a Rated Market Participant that has an Investment Grade Rating and an Unrated Market Participant that satisfies the Credit Threshold.

**Credit Threshold** consists of the conditions for Unrated Market Participants outlined in Section II.B.2 of the ISO New England Financial Assurance Policy.

**Critical Energy Infrastructure Information (CEII)** is defined in Section 3.0(j) of the ISO New England Information Policy, which is Attachment D to the Tariff.

**Current Ratio** is, on any date, all of a Market Participant's or Non-Market Participant Transmission Customer's current assets divided by all of its current liabilities, in each case as shown on the most recent financial statements provided by such Market Participant or Non-Market Participant Transmission Customer to the ISO.

**Curtailement** is a reduction in the dispatch of a transaction that was scheduled, using transmission service, in response to a transfer capability shortage as a result of system reliability conditions.

**Customer** is a Market Participant, a Transmission Customer or another customer of the ISO.

**Cyber Security Exigency** is a suspicious or malicious electronic act or event that compromises or attempts to compromise, or disrupts or attempts to disrupt, the ongoing operation of the ISO, the New England Markets, or reliability within the New England Control Area or other electrical facilities directly or indirectly connected to the New England Transmission System and (i) whose severity or nature reasonably requires that the ISO obtain expert assistance not normally called upon to counter such an electronic act or resolve such an event or (ii) whose nature requires the ISO to report such an electronic act or event pursuant to NERC Critical Infrastructure Protection Reliability Standards or applicable regulations promulgated by the Department of Homeland Security, the Department of Energy, or a federal agency with similar cybersecurity responsibilities (or any of their respective successor organizations or agencies).

**Data Reconciliation Process** means the process by which meter reconciliation and data corrections that are discovered by Governance Participants after the Invoice has been issued for a particular month or that are discovered prior to the issuance of the Invoice for the relevant month but not included in that Invoice or in the other Invoices for that month and are reconciled by the ISO on an hourly basis based on data submitted to the ISO by the Host Participant Assigned Meter Reader or Assigned Meter Reader.

**Day-Ahead** is the calendar day immediately preceding the Operating Day.

**Day-Ahead Adjusted Load Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Congestion Revenue** is defined in Section III.3.2.1(i) of Market Rule 1.

**Day-Ahead Demand Reduction Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Energy Market** means the schedule of commitments for the purchase or sale of energy, purchase of demand reductions, payment of Congestion Costs, payment for losses developed by the ISO as a result of the offers and specifications submitted in accordance with Section III.1.10 of Market Rule 1.

**Day-Ahead Energy Market Congestion Charge/Credit** is defined in Section III.3.2.1(f) of Market Rule 1.

**Day-Ahead Energy Market Energy Charge/Credit** is defined in Section III.3.2.1(f) of Market Rule 1.

**Day-Ahead Energy Market Loss Charge/Credit** is defined in Section III.3.2.1(f) of Market Rule 1.

**Day-Ahead Energy Market NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Day-Ahead External Transaction Export and Decrement Bid NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Day-Ahead External Transaction Import and Increment Offer NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Day-Ahead Generation Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Load Obligation** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Locational Adjusted Net Interchange** is defined in Section III.3.2.1(a) of Market Rule 1.

**Day-Ahead Loss Charges or Credits** is defined in Section III.3.2.1(k) of Market Rule 1.

**Day-Ahead Loss Revenue** is defined in Section III.3.2.1(j) of Market Rule 1.

**Day-Ahead Prices** means the Locational Marginal Prices resulting from the Day-Ahead Energy Market.

**DDP Dispatchable Resource** is any Dispatchable Resource that the ISO dispatches using Desired Dispatch Points in the Resource's Dispatch Instructions.

**Debt-to-Total Capitalization Ratio** is, on any date, a Market Participant's or Non-Market Participant Transmission Customer's total debt (including all current borrowings) divided by its total shareholders' equity plus total debt, in each case as shown on the most recent financial statements provided by such Market Participant or Non-Market Participant Transmission Customer to the ISO.

**Decrement Bid** means a bid to purchase energy at a specified Location in the Day-Ahead Energy Market which is not associated with a physical load. An accepted Decrement Bid results in scheduled load at the specified Location in the Day-Ahead Energy Market.

**Default Amount** is all or any part of any amount due to be paid by any Covered Entity that the ISO, in its reasonable opinion, believes will not or has not been paid when due (other than in the case of a payment dispute for any amount due for transmission service under the OATT).

**Default Period** is defined in Section 3.3.h(i) of the ISO New England Billing Policy.

**Delivering Party** is the entity supplying capacity and/or energy to be transmitted at Point(s) of Receipt under the OATT.

**Demand Bid** means a request to purchase an amount of energy, at a specified Location, or an amount of energy at a specified price, that is associated with a physical load. A cleared Demand Bid in the Day-Ahead Energy Market results in scheduled load at the specified Location. Demand Bids submitted for use in the Real-Time Energy Market are specific to Dispatchable Asset Related Demands only.

**Demand Bid Block-Hours** are the Block-Hours assigned to the submitting Customer for each Demand Bid.

**Demand Bid Cap** is \$2,000/MWh.

**Demand Capacity Resource** means an Existing Demand Capacity Resource or a New Demand Capacity Resource. There are three Demand Capacity Resource types: Active Demand Capacity Resources, On-Peak Demand Resources, and Seasonal Peak Demand Resources.

**Demand Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for Demand Response Resources in accordance with the provisions set forth in ISO New England Operating Procedure No. 14.

**Demand Reduction Offer** is an offer by a Market Participant with a Demand Response Resource to reduce demand.

**Demand Reduction Offer Block-Hours** are Block-Hours assigned to the Lead Market Participant for each Demand Reduction Offer. Blocks of the Demand Reduction Offer in effect for each hour will be totaled to determine the quantity of Demand Reduction Offer Block-Hours for a given day. In the case that a Resource has a Real-Time unit status of “unavailable” for the entire day, that day will not contribute to the quantity of Demand Reduction Offer Block-Hours. However, if the Resource has at least one hour of the day with a unit status of “available,” the entire day will contribute to the quantity of Demand Reduction Offer Block-Hours.

**Demand Reduction Threshold Price** is a minimum offer price calculated pursuant to Section III.1.10.1A(f).

**Demand Resource On-Peak Hours** are hours ending 1400 through 1700, Monday through Friday on non-Demand Response Holidays during the months of June, July, and August and hours ending 1800 through 1900, Monday through Friday on non-Demand Response Holidays during the months of December and January.

**Demand Resource Seasonal Peak Hours** are those hours in which the actual, real-time hourly load, as measured using real-time telemetry (adjusted for transmission and distribution losses, and excluding load associated with Exports and Storage DARDs) for Monday through Friday on non-Demand Response Holidays, during the months of June, July, August, December, and January, as determined by the ISO, is



equal to or greater than 90% of the most recent 50/50 system peak load forecast, as determined by the ISO, for the applicable summer or winter season.

**Demand Response Asset** is an asset comprising the demand reduction capability of an individual end-use customer at a Retail Delivery Point or the aggregated demand reduction capability of multiple end-use customers from multiple delivery points (as described in Section III.8.1.1(f)) that has been registered in accordance with III.8.1.1.

**Demand Response Available** is the capability of the Demand Response Resource, in whole or in part, at any given time, to reduce demand in response to a Dispatch Instruction.

**Demand Response Baseline** is the expected baseline demand of an individual end-use metered customer or group of end-use metered customers as determined pursuant to Section III.8.2.

**Demand Response Holiday** is New Year's Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving Day, and Christmas Day. If the holiday falls on a Saturday, the holiday will be observed on the preceding Friday; if the holiday falls on a Sunday, the holiday will be observed on the following Monday.

**Demand Response Resource** is an individual Demand Response Asset or aggregation of Demand Response Assets within a DRR Aggregation Zone that has been registered in accordance with Section III.8.1.2.

**Demand Response Resource Notification Time** is the period of time between the receipt of a startup Dispatch Instruction and the time the Demand Response Resource starts reducing demand.

**Demand Response Resource Ramp Rate** is the average rate, expressed in MW per minute, at which the Demand Response Resource can reduce demand.

**Demand Response Resource Start-Up Time** is the period of time between the time a Demand Response Resource starts reducing demand at the conclusion of the Demand Response Resource Notification Time and the time the resource can reach its Minimum Reduction and be ready for further dispatch by the ISO.

**Designated Agent** is any entity that performs actions or functions required under the OATT on behalf of the ISO, a Transmission Owner, a Schedule 20A Service Provider, an Eligible Customer, or a Transmission Customer.

**Designated Blackstart Resource** is a resource that meets the eligibility requirements specified in Schedule 16 of the OATT, which includes any resource referred to previously as a Category B Designated Blackstart Resource.

**Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for a Generator Asset and/or Dispatchable Asset Related Demand in accordance with the provisions set forth in ISO New England Operating Procedure No. 14.

**Designated FCM Participant** is any Lead Market Participant, including any Provisional Member that is a Lead Market Participant, transacting in any Forward Capacity Auction, reconfiguration auctions or Capacity Supply Obligation Bilateral for capacity that is otherwise required to provide additional financial assurance under the ISO New England Financial Assurance Policy.

**Designated FTR Participant** is a Market Participant, including FTR-Only Customers, transacting in the FTR Auction that is otherwise required to provide additional financial assurance under the ISO New England Financial Assurance Policy.

**Desired Dispatch Point (DDP)** means the control signal, expressed in megawatts, transmitted to direct the output, consumption, or demand reduction level of each Generator Asset, Dispatchable Asset Related Demand, or Demand Response Resource dispatched by the ISO in accordance with the asset's Offer Data.

**Direct Assignment Facilities** are facilities or portions of facilities that are constructed for the sole use/benefit of a particular Transmission Customer requesting service under the OATT or a Generator Owner requesting an interconnection. Direct Assignment Facilities shall be specified in a separate agreement among the ISO, Interconnection Customer and Transmission Customer, as applicable, and the Transmission Owner whose transmission system is to be modified to include and/or interconnect with the Direct Assignment Facilities, shall be subject to applicable Commission requirements, and shall be paid for by the Customer in accordance with the applicable agreement and the Tariff.

**Directly Metered Assets** are specifically measured by OP-18 compliant metering as currently described in Section IV (Metering and Recording for Settlements) of OP-18. Directly Metered Assets include all Tie-Line Assets, all Generator Assets, as well as some Load Assets. Load Assets for which the Host Participant is not the Assigned Meter Reader are considered Directly Metered Assets. In addition, the Host Participant Assigned Meter Reader determines which additional Load Assets are considered Directly Metered Assets and which ones are considered Profiled Load Assets based upon the Host Participant Assigned Meter Reader reporting systems and process by which the Host Participant Assigned Meter Reader allocates non-PTF losses.

**Disbursement Agreement** is the Rate Design and Funds Disbursement Agreement among the PTOs, as amended and restated from time to time.

**Dispatch Instruction** means directions given by the ISO to Market Participants, which may include instructions to start up, shut down, raise or lower generation, curtail or restore loads from Demand Response Resources, change External Transactions, or change the status or consumption of a Dispatchable Asset Related Demand in accordance with the Supply Offer, Demand Bid, or Demand Reduction Offer parameters. Such instructions may also require a change to the operation of a Pool Transmission Facility. Such instructions are given through either electronic or verbal means.

**Dispatch Zone** means a subset of Nodes located within a Load Zone established by the ISO for each Capacity Commitment Period pursuant to Section III.12.4A.

**Dispatchable Asset Related Demand (DARD)** is an Asset Related Demand that is capable of having its energy consumption modified in Real-Time in response to Dispatch Instructions. A DARD must be capable of receiving and responding to electronic Dispatch Instructions, must be able to increase or decrease energy consumption between its Minimum Consumption Limit and Maximum Consumption Limit in accordance with Dispatch Instructions, and must meet the technical requirements specified in the ISO New England Operating Procedures and Manuals.

**Dispatchable Resource** is any Generator Asset, Dispatchable Asset Related Demand, Demand Response Resource, or, with respect to the Regulation Market only, Alternative Technology Regulation Resource, that, during the course of normal operation, is capable of receiving and responding to electronic Dispatch Instructions in accordance with the parameters contained in the Resource's Supply Offer, Demand Bid, Demand Reduction Offer or Regulation Service Offer. A Resource that is normally classified as a

Dispatchable Resource remains a Dispatchable Resource when it is temporarily not capable of receiving and responding to electronic Dispatch Instructions.

**Dispute Representatives** are defined in 6.5.c of the ISO New England Billing Policy.

**Disputed Amount** is a Covered Entity's disputed amount due on any fully paid monthly Invoice and/or any amount believed to be due or owed on a Remittance Advice, as defined in Section 6 of the ISO New England Billing Policy.

**Disputing Party**, for the purposes of the ISO New England Billing Policy, is any Covered Entity seeking to recover a Disputed Amount.

**Distributed Generation** means generation directly connected to end-use customer load and located behind the end-use customer's Retail Delivery Point that reduces the amount of energy that would otherwise have been produced on the electricity network in the New England Control Area, provided that the facility's Net Supply Capability is (i) less than 5 MW or (ii) less than or equal to the Maximum Facility Load, whichever is greater.

**DRR Aggregation Zone** is a Dispatch Zone entirely within a single Reserve Zone or Rest of System or, where a Dispatch Zone is not entirely within a single Reserve Zone or Rest of System, each portion of the Dispatch Zone demarcated by the Reserve Zone boundary.

**Do Not Exceed (DNE) Dispatchable Generator** is any Generator Asset that is dispatched using Do Not Exceed Dispatch Points in its Dispatch Instructions and meets the criteria specified in Section III.1.11.3(e). Do Not Exceed Dispatchable Generators are Dispatchable Resources.

**Do Not Exceed Dispatch Point** is a Dispatch Instruction indicating a maximum output level that a DNE Dispatchable Generator must not exceed.

**Dynamic De-List Bid** is a bid that may be submitted by Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Capacity Resources in the Forward Capacity Auction below the Dynamic De-List Bid Threshold, as described in Section III.13.2.3.2(d) of Market Rule 1.

**Dynamic De-List Bid Threshold** is the price specified in Section III.13.1.2.3.1.A of Market Rule 1 associated with the submission of Dynamic De-List Bids in the Forward Capacity Auction.

**EA Amount** is defined in Section IV.B.2.2 of the Tariff.

**Early Amortization Charge (EAC)** is defined in Section IV.B.2 of the Tariff.

**Early Amortization Working Capital Charge (EAWCC)** is defined in Section IV.B.2 of the Tariff.

**Early Payment Shortfall Funding Amount (EPSF Amount)** is defined in Section IV.B.2.4 of the Tariff.

**Early Payment Shortfall Funding Charge (EPSFC)** is defined in Section IV.B.2 of the Tariff.

**EAWW Amount** is defined in Section IV.B.2.3 of the Tariff.

**EBITDA-to-Interest Expense Ratio** is, on any date, a Market Participant's or Non-Market Participant Transmission Customer's earnings before interest, taxes, depreciation and amortization in the most recent fiscal quarter divided by that Market Participant's or Non-Market Participant Transmission Customer's expense for interest in that fiscal quarter, in each case as shown on the most recent financial statements provided by such Market Participant or Non-Market Participant Transmission Customer to the ISO.

**Economic Dispatch Point** is the output, reduction, or consumption level to which a Resource would have been dispatched, based on the Resource's Supply Offer, Demand Reduction Offer, or Demand Bid and the Real-Time Price, and taking account of any operating limits, had the ISO not dispatched the Resource to another Desired Dispatch Point.

**Economic Maximum Limit or Economic Max** is the maximum available output, in MW, of a Generator Asset that a Market Participant offers to supply in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the Generator Asset's Offer Data. This represents the highest MW output a Market Participant has offered for a Generator Asset for economic dispatch. A Market Participant must maintain an up-to-date Economic Maximum Limit (and where applicable, must provide the ISO with any telemetry required by ISO New England Operating Procedure No. 18 to allow the ISO to maintain an

updated Economic Maximum Limit) for all hours in which a Generator Asset has been offered into the Day-Ahead Energy Market or Real-Time Energy Market.

**Economic Minimum Limit or Economic Min** is (a) for a Generator Asset with an incremental heat rate, the maximum of: (i) the lowest sustainable output level as specified by physical design characteristics, environmental regulations or licensing limits; and (ii) the lowest sustainable output level at which a one MW increment increase in the output level would not decrease the incremental cost, calculated based on the incremental heat rate, of providing an additional MW of output, and (b) for a Generator Asset without an incremental heat rate, the lowest sustainable output level that is consistent with the physical design characteristics of the Generator Asset and with meeting all environmental regulations and licensing limits, and (c) for a Generator Asset undergoing Facility and Equipment Testing or auditing, the level to which the Generator Asset requests and is approved to operate or is directed to operate for purposes of completing the Facility and Equipment Testing or auditing, and (d) for Non-Dispatchable Resources the output level at which a Market Participant anticipates its Non-Dispatchable Resource will be available to operate based on fuel limitations, physical design characteristics, environmental regulations or licensing limits.

**Economic Study or Economic Studies** are studies described in Section 17 of Attachment K to the OATT that are used to examine situations where potential regulated transmission solutions, market responses, or investments could result in (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of the OATT, (ii) reduced congestion, or (iii) the integration of new resources or loads, or both, on an aggregate or regional basis.

**Effective Offer** is the Supply Offer, Demand Reduction Offer, or Demand Bid that is used for NCPC calculation purposes as specified in Section III.F.1(a).

**EFT** is electronic funds transfer.

**Elective Transmission Upgrade** is defined in Section I of Schedule 25 of the OATT.

**Elective Transmission Upgrade Interconnection Customer** is defined in Schedule 25 of the OATT.

**Electric Reliability Organization (ERO)** is defined in 18 C.F.R. § 39.1.

**Electric Storage Facility** is a storage facility that participates in the New England Markets as described in Section III.1.10.6 of Market Rule 1.

**Eligible Customer** is: (i) Any entity that is engaged, or proposes to engage, in the wholesale or retail electric power business is an Eligible Customer under the OATT. (ii) Any electric utility (including any power marketer), Federal power marketing agency, or any other entity generating electric energy for sale or for resale is an Eligible Customer under the OATT. Electric energy sold or produced by such entity may be electric energy produced in the United States, Canada or Mexico. However, with respect to transmission service that the Commission is prohibited from ordering by Section 212(h) of the Federal Power Act, such entity is eligible only if the service is provided pursuant to a state requirement that the Transmission Owner with which that entity is directly interconnected or the distribution company having the service territory in which that entity is located (if that entity is a retail customer) offer the unbundled transmission service or Local Delivery Service, or pursuant to a voluntary offer of such service by the Transmission Owner with which that entity is directly interconnected or the distribution company having the service territory in which that entity is located (if that entity is a retail customer). (iii) Any end user taking or eligible to take unbundled transmission service or Local Delivery Service pursuant to a state requirement that the Transmission Owner with which that end user is directly interconnected or the distribution company having the service territory in which that entity is located (if that entity is a retail customer) offer the transmission service or Local Delivery Service, or pursuant to a voluntary offer of such service by the Transmission Owner with which that end user is directly interconnected, or the distribution company having the service territory in which that entity is located (if that entity is a retail customer) is an Eligible Customer under the OATT.

**Eligible FTR Bidder** is an entity that has satisfied applicable financial assurance criteria, and shall not include the auctioneer, its Affiliates, and their officers, directors, employees, consultants and other representatives.

**Emergency** is an abnormal system condition on the bulk power systems of New England or neighboring Control Areas requiring manual or automatic action to maintain system frequency, or to prevent the involuntary loss of load, equipment damage, or tripping of system elements that could adversely affect the reliability of an electric system or the safety of persons or property; or a fuel shortage requiring departure from normal operating procedures in order to minimize the use of such scarce fuel; or a condition that requires implementation of Emergency procedures as defined in the ISO New England Manuals.

**Emergency Condition** means an Emergency has been declared by the ISO in accordance with the procedures set forth in the ISO New England Manuals and ISO New England Administrative Procedures.

**Emergency Energy** is energy transferred from one control area operator to another in an Emergency.

**Emergency Minimum Limit or Emergency Min** means the minimum output, in MWs, that a Generator Asset can deliver for a limited period of time without exceeding specified limits of equipment stability and operating permits.

**EMS** is energy management system.

**End-of-Round Price** is the lowest price associated with a round of a Forward Capacity Auction, as described in Section III.13.2.3.1 of Market Rule 1.

**End User Participant** is defined in Section 1 of the Participants Agreement.

**Energy** is power produced in the form of electricity, measured in kilowatthours or megawatthours.

**Energy Administration Service (EAS)** is the service provided by the ISO, as described in Schedule 2 of Section IV.A of the Tariff.

**Energy Component** means the Locational Marginal Price at the reference point.

**Energy Efficiency** is installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that reduce the total amount of electrical energy needed, while delivering a comparable or improved level of end-use service. Such measures include, but are not limited to, the installation of more energy efficient lighting, motors, refrigeration, HVAC equipment and control systems, envelope measures, operations and maintenance procedures, and industrial process equipment.

**Energy Imbalance Service** is the form of Ancillary Service described in Schedule 4 of the OATT.

**Energy Market** is, collectively, the Day-Ahead Energy Market and the Real-Time Energy Market.



**Energy Non-Zero Spot Market Settlement Hours** are the sum of the hours for which the Customer has a positive or negative Real-Time System Adjusted Net Interchange or for which the Customer has a positive or negative Real-Time Demand Reduction Obligation as determined by the ISO settlement process for the Energy Market.

**Energy Offer Floor** is negative \$150/MWh.

**Energy Transaction Units (Energy TUs)** are the sum for the month for a Customer of Bilateral Contract Block-Hours, Demand Bid Block-Hours, Asset Related Demand Bid Block-Hours, Supply Offer Block-Hours, Demand Reduction Offer Block-Hours, and Energy Non-Zero Spot Market Settlement Hours.

**Equipment Damage Reimbursement** is the compensation paid to the owner of a Designated Blackstart Resource as specified in Section 5.5 of Schedule 16 to the OATT.

**Equivalent Demand Forced Outage Rate (EFORD)** means the portion of time a unit is in demand, but is unavailable due to forced outages.

**Estimated Capacity Load Obligation** is, for the purposes of the ISO New England Financial Assurance Policy, a Market Participant's share of Zonal Capacity Obligation from the latest available month, adjusted as appropriate to account for any relevant Capacity Load Obligation Bilaterals, HQICCs, and Self-Supplied FCA Resource designations for the applicable month.

**Establish Claimed Capability Audit** is the audit performed pursuant to Section III.1.5.1.2.

**Excepted Transaction** is a transaction specified in Section II.40 of the Tariff for the applicable period specified in that Section.

**Existing Capacity Qualification Deadline** is a deadline, specified in Section III.13.1.10 of Market Rule 1, for submission of certain qualification materials for the Forward Capacity Auction, as discussed in Section III.13.1 of Market Rule 1.

**Existing Capacity Qualification Package** is information submitted for certain existing resources prior to participation in the Forward Capacity Auction, as described in Section III.13.1 of Market Rule 1.

**Existing Capacity Resource** is any resource that does not meet any of the eligibility criteria to participate in the Forward Capacity Auction as a New Capacity Resource.

**Existing Capacity Retirement Deadline** is a deadline, specified in Section III.13.1.10 of Market Rule 1, for submission of certain qualification materials for the Forward Capacity Auction, as discussed in Section III.13.1 of Market Rule 1.

**Existing Capacity Retirement Package** is information submitted for certain existing resources prior to participation in the Forward Capacity Auction, as described in Section III.13.1 of Market Rule 1.

**Existing Demand Capacity Resource** is a type of Demand Capacity Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.2 of Market Rule 1.

**Existing Generating Capacity Resource** is a type of resource participating in the Forward Capacity Market, as defined in Section III.13.1.2.1 of Market Rule 1.

**Existing Import Capacity Resource** is a type of resource participating in the Forward Capacity Market, as defined in Section III.13.1.3.1 of Market Rule 1.

**Expedited Study Request** is defined in Section II.34.7 of the OATT.

**Export-Adjusted LSR** is as defined in Section III.12.4(b)(ii).

**Export Bid** is a bid that may be submitted by certain resources in the Forward Capacity Auction to export capacity to an external Control Area, as described in Section III.13.1.2.3.1.3 of Market Rule 1.

**Exports** are Real-Time External Transactions, which are limited to sales from the New England Control Area, for exporting energy out of the New England Control Area.

**External Elective Transmission Upgrade (External ETU)** is defined in Section I of Schedule 25 of the OATT.

**External Market Monitor** means the person or entity appointed by the ISO Board of Directors pursuant to Section III.A.1.2 of Appendix A of Market Rule 1 to carry out the market monitoring and mitigation functions specified in Appendix A and elsewhere in Market Rule 1.

**External Node** is a proxy bus or buses used for establishing a Locational Marginal Price for energy received by Market Participants from, or delivered by Market Participants to, a neighboring Control Area or for establishing Locational Marginal Prices associated with energy delivered through the New England Control Area by Non-Market Participants for use in calculating Non-Market Participant Congestion Costs and loss costs.

**External Resource** means a generation resource located outside the metered boundaries of the New England Control Area.

**External Transaction** is the import of external energy into the New England Control Area by a Market Participant or the export of internal energy out of the New England Control Area by a Market Participant in the Day-Ahead Energy Market and/or Real-Time Energy Market, or the wheeling of external energy through the New England Control Area by a Market Participant or a Non-Market Participant in the Real-Time Energy Market.

**External Transaction Cap** is \$2,000/MWh for External Transactions other than Coordinated External Transactions and \$1,000/MWh for Coordinated External Transactions.

**External Transaction Floor** is the Energy Offer Floor for External Transactions other than Coordinated External Transactions and negative \$1,000/MWh for Coordinated External Transactions.

**External Transmission Project** is a transmission project comprising facilities located wholly outside the New England Control Area and regarding which an agreement has been reached whereby New England ratepayers will support all or a portion of the cost of the facilities.

**Facilities Study** is an engineering study conducted pursuant to the OATT by the ISO (or, in the case of Local Service or interconnections to Local Area Facilities as defined in the TOA, by one or more affected PTOs) or some other entity designated by the ISO in consultation with any affected Transmission Owner(s), to determine the required modifications to the PTF and Non-PTF, including the cost and

scheduled completion date for such modifications, that will be required to provide a requested transmission service or interconnection on the PTF and Non-PTF.

**Facility and Equipment Testing** means operation of a Resource to evaluate the functionality of the facility or equipment utilized in the operation of the facility.

**Failure to Maintain Blackstart Capability** is a failure of a Blackstart Owner or Designated Blackstart Resource to meet the Blackstart Service Minimum Criteria or Blackstart Service obligations, but does not include a Failure to Perform During a System Restoration event.

**Failure to Perform During a System Restoration** is a failure of a Blackstart Owner or Designated Blackstart Resource to follow ISO or Local Control Center dispatch instructions or perform in accordance with the dispatch instructions or the Blackstart Service Minimum Criteria and Blackstart Service obligations, described within the ISO New England Operating Documents, during a restoration of the New England Transmission System.

**Fast Start Demand Response Resource** is a Demand Response Resource that meets the following criteria: (i) Minimum Reduction Time does not exceed one hour; (ii) Minimum Time Between Reductions does not exceed one hour; (iii) Demand Response Resource Start-Up Time plus Demand Response Resource Notification Time does not exceed 30 minutes; (iv) has personnel available to respond to Dispatch Instructions or has automatic remote response capability; and (v) is capable of receiving and acknowledging a Dispatch Instruction electronically.

**Fast Start Generator** means a Generator Asset that the ISO can dispatch to an on-line or off-line state through electronic dispatch and that meets the following criteria: (i) Minimum Run Time does not exceed one hour; (ii) Minimum Down Time does not exceed one hour; (iii) cold Notification Time plus cold Start-Up Time does not exceed 30 minutes; (iv) available for dispatch (when it is either in an on-line or off-line state) and manned or has automatic remote dispatch capability; and (v) capable of receiving and acknowledging a start-up or shut-down Dispatch Instruction electronically.

**FCA Cleared Export Transaction** is defined in Section III.1.10.7(f)(ii) of Market Rule 1.

**FCA Qualified Capacity** is the Qualified Capacity that is used in a Forward Capacity Auction.

**FCM Capacity Charge Requirements** are calculated in accordance with Section VII.C of the ISO New England Financial Assurance Policy.

**FCM Charge Rate** is calculated in accordance with Section VII.C of the ISO New England Financial Assurance Policy.

**FCM Commercial Operation** is defined in Section III.13.3.8 of Market Rule 1.

**FCM Deposit** is calculated in accordance with Section VII.B.1 of the ISO New England Financial Assurance Policy.

**FCM Financial Assurance Requirements** are described in Section VII of the ISO New England Financial Assurance Policy.

**Final Forward Reserve Obligation** is calculated in accordance with Section III.9.8(a) of Market Rule 1.

**Financial Assurance Default** results from a Market Participant or Non-Market Participant Transmission Customer's failure to comply with the ISO New England Financial Assurance Policy.

**Financial Assurance Obligations** relative to the ISO New England Financial Assurance Policy are determined in accordance with Section III.A(v) of the ISO New England Financial Assurance Policy.

**Financial Transmission Right (FTR)** is a financial instrument that evidences the rights and obligations specified in Sections III.5.2.2 and III.7 of the Tariff.

**Firm Point-To-Point Service** is service which is arranged for and administered between specified Points of Receipt and Delivery in accordance with Part II.C of the OATT.

**Firm Transmission Service** is Regional Network Service, Through or Out Service, service for Excepted Transactions, firm MTF Service, firm OTF Service, and firm Local Service.

**Flexible DNE Dispatchable Generator** is any DNE Dispatchable Generator that meets the following criteria: (i) Minimum Run Time does not exceed one hour; (ii) Minimum Down Time does not exceed one hour; and (iii) cold Notification Time plus cold Start-Up Time does not exceed 30 minutes.

**Force Majeure** - An event of Force Majeure means any act of God, labor disturbance, act of the public enemy or terrorists, war, invasion, insurrection, riot, fire, storm or flood, ice, explosion, breakage or accident to machinery or equipment, any curtailment, order, regulation or restriction imposed by governmental military or lawfully established civilian authorities, or any other cause beyond the control of the ISO, a Transmission Owner, a Schedule 20A Service Provider, or a Customer, including without limitation, in the case of the ISO, any action or inaction by a Customer, a Schedule 20A Service Provider, or a Transmission Owner, in the case of a Transmission Owner, any action or inaction by the ISO, any Customer, a Schedule 20A Service Provider, or any other Transmission Owner, in the case of a Schedule 20A Service Provider, any action or inaction by the ISO, any Customer, a Transmission Owner, or any other Schedule 20A Service Provider, and, in the case of a Transmission Customer, any action or inaction by the ISO, a Schedule 20A Service Provider, or any Transmission Owner.

**Forward Capacity Auction (FCA)** is the annual Forward Capacity Market auction process described in Section III.13.2 of Market Rule 1.

**Forward Capacity Auction Starting Price** is calculated in accordance with Section III.13.2.4 of Market Rule 1.

**Forward Capacity Market (FCM)** is the forward market for procuring capacity in the New England Control Area, as described in Section III.13 of Market Rule 1.

**Forward Energy Inventory Election** is the total MWh value for which a Market Participant elects to be compensated at the forward rate in the inventoried energy program as described in Section III.K.1(d) of Market Rule 1.

**Forward LNG Inventory Election** is the portion of a Market Participant's Forward Energy Inventory Election attributed to liquefied natural gas in the inventoried energy program as described in Section III.K.1(d) of Market Rule 1.

**Forward Reserve** means TMNSR and TMOR purchased by the ISO on a forward basis on behalf of Market Participants as provided for in Section III.9 of Market Rule 1.

**Forward Reserve Assigned Megawatts** is the amount of Forward Reserve, in megawatts, that a Market Participant assigns to eligible Forward Reserve Resources to meet its Forward Reserve Obligation as defined in Section III.9.4.1 of Market Rule 1.

**Forward Reserve Auction** is the periodic auction conducted by the ISO in accordance with Section III.9 of Market Rule 1 to procure Forward Reserve.

**Forward Reserve Auction Offers** are offers to provide Forward Reserve to meet system and Reserve Zone requirements as submitted by a Market Participant in accordance with Section III.9.3 of Market Rule 1.

**Forward Reserve Charge** is a Market Participant's share of applicable system and Reserve Zone Forward Reserve costs attributable to meeting the Forward Reserve requirement as calculated in accordance with Section III.9.9 of Market Rule 1.

**Forward Reserve Clearing Price** is the clearing price for TMNSR or TMOR, as applicable, for the system and each Reserve Zone resulting from the Forward Reserve Auction as defined in Section III.9.4 of Market Rule 1.

**Forward Reserve Credit** is the credit received by a Market Participant that is associated with that Market Participant's Final Forward Reserve Obligation as calculated in accordance with Section III.9.8 of Market Rule 1.

**Forward Reserve Delivered Megawatts** are calculated in accordance with Section III.9.6.5 of Market Rule 1.

**Forward Reserve Delivery Period** is defined in Section III.9.1 of Market Rule 1.

**Forward Reserve Failure-to-Activate Megawatts** are calculated in accordance with Section III.9.7.2(a) of Market Rule 1.

**Forward Reserve Failure-to-Activate Penalty** is the penalty associated with a Market Participant's failure to activate Forward Reserve when requested to do so by the ISO and is defined in Section III.9.7.2 of Market Rule 1.

**Forward Reserve Failure-to-Activate Penalty Rate** is specified in Section III.9.7.2 of Market Rule 1.

**Forward Reserve Failure-to-Reserve**, as specified in Section III.9.7.1 of Market Rule 1, occurs when a Market Participant's Forward Reserve Delivered Megawatts for a Reserve Zone in an hour is less than that Market Participant's Forward Reserve Obligation for that Reserve Zone in that hour. Under these circumstances the Market Participant pays a penalty based upon the Forward Reserve Failure-to-Reserve Penalty Rate and that Market Participant's Forward Reserve Failure-to-Reserve Megawatts.

**Forward Reserve Failure-to-Reserve Megawatts** are calculated in accordance with Section III.9.7.1(a) of Market Rule 1.

**Forward Reserve Failure-to-Reserve Penalty** is the penalty associated with a Market Participant's failure to reserve Forward Reserve and is defined in Section III.9.7.1 of Market Rule 1.

**Forward Reserve Failure-to-Reserve Penalty Rate** is specified in Section III.9.7.1(b)(ii) of Market Rule 1.

**Forward Reserve Fuel Index** is the index or set of indices used to calculate the Forward Reserve Threshold Price as defined in Section III.9.6.2 of Market Rule 1.

**Forward Reserve Heat Rate** is the heat rate as defined in Section III.9.6.2 of Market Rule 1 that is used to calculate the Forward Reserve Threshold Price.

**Forward Reserve Market** is a market for forward procurement of two reserve products, Ten-Minute Non-Spinning Reserve (TMNSR) and Thirty-Minute Operating Reserve (TMOR).

**Forward Reserve MWs** are those megawatts assigned to specific eligible Forward Reserve Resources which convert a Forward Reserve Obligation into a Resource-specific obligation.

**Forward Reserve Obligation** is a Market Participant's amount, in megawatts, of Forward Reserve that cleared in the Forward Reserve Auction and adjusted, as applicable, to account for bilateral transactions that transfer Forward Reserve Obligations.



**Forward Reserve Obligation Charge** is defined in Section III.10.4 of Market Rule 1.

**Forward Reserve Offer Cap** is \$9,000/megawatt-month.

**Forward Reserve Payment Rate** is defined in Section III.9.8 of Market Rule 1.

**Forward Reserve Procurement Period** is defined in Section III.9.1 of Market Rule 1.

**Forward Reserve Qualifying Megawatts** refer to all or a portion of a Forward Reserve Resource's capability offered into the Real-Time Energy Market at energy offer prices above the applicable Forward Reserve Threshold Price that are calculated in accordance with Section III.9.6.4 of Market Rule 1.

**Forward Reserve Resource** is a Resource that meets the eligibility requirements defined in Section III.9.5.2 of Market Rule 1 that has been assigned Forward Reserve Obligation by a Market Participant.

**Forward Reserve Threshold Price** is the minimum price at which assigned Forward Reserve Megawatts are required to be offered into the Real-Time Energy Market as calculated in Section III.9.6.2 of Market Rule 1.

**FTR Auction** is the periodic auction of FTRs conducted by the ISO in accordance with Section III.7 of Market Rule 1.

**FTR Auction Revenue** is the revenue collected from the sale of FTRs in FTR Auctions. FTR Auction Revenue is payable to FTR Holders who submit their FTRs for sale in the FTR Auction in accordance with Section III.7 of Market Rule 1 and to ARR Holders and Incremental ARR Holders in accordance with Appendix C of Market Rule 1.

**FTR Credit Test Percentage** is calculated in accordance with Section III.B.1(b) of the ISO New England Financial Assurance Policy.

**FTR Financial Assurance Requirements** are described in Section VI of the ISO New England Financial Assurance Policy.

**FTR Holder** is an entity that acquires an FTR through the FTR Auction to Section III.7 of Market Rule 1 and registers with the ISO as the holder of the FTR in accordance with Section III.7 of Market Rule 1 and applicable ISO New England Manuals.

**FTR-Only Customer** is a Market Participant that transacts in the FTR Auction and that does not participate in other markets or programs of the New England Markets. References in this Tariff to a “Non-Market Participant FTR Customers” and similar phrases shall be deemed references to an FTR-Only Customer.

**FTR Settlement Risk Financial Assurance** is an amount of financial assurance required by a Designated FTR Participant for each bid submission into an FTR Auction and for each bid awarded to the individual participant in an FTR Auction. This amount is calculated pursuant to Section VI.A of the ISO New England Financial Assurance Policy.

**GADS Data** means data submitted to the NERC for collection into the NERC’s Generating Availability Data System (GADS).

**Gap Request for Proposals (Gap RFP)** is defined in Section III.11 of Market Rule 1.

**Gas Day** means a period of 24 consecutive hours beginning at 0900 hrs Central Time.

**Generating Capacity Resource** means a New Generating Capacity Resource or an Existing Generating Capacity Resource.

**Generator Asset** is a device (or a collection of devices) that is capable of injecting real power onto the grid that has been registered as a Generator Asset in accordance with the Asset Registration Process.

**Generator Imbalance Service** is the form of Ancillary Service described in Schedule 10 of the OATT.

**Generator Interconnection Related Upgrade** is an addition to or modification of the New England Transmission System (pursuant to Section II.47.1, Schedule 22 or Schedule 23 of the OATT) to effect the interconnection of a new generating unit or an existing generating unit whose energy capability or capacity capability is being materially changed and increased whether or not the interconnection is being effected to meet the Capacity Capability Interconnection Standard or the Network Capability

Interconnection Standard. As to Category A Projects (as defined in Schedule 11 of the OATT), a Generator Interconnection Related Upgrade also includes an upgrade beyond that required to satisfy the Network Capability Interconnection Standard (or its predecessor) for which the Generator Owner has committed to pay prior to October 29, 1998.

**Generator Owner** is the owner, in whole or part, of a generating unit whether located within or outside the New England Control Area.

**Good Utility Practice** means any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather includes all acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act Section 215(a)(4).

**Governance Only Member** is defined in Section 1 of the Participants Agreement.

**Governance Participant** is defined in the Participants Agreement.

**Governing Documents**, for the purposes of the ISO New England Billing Policy, are the Transmission, Markets and Services Tariff and ISO Participants Agreement.

**Governing Rating** is the lowest corporate rating from any Rating Agency for that Market Participant, or, if the Market Participant has no corporate rating, then the lowest rating from any Rating Agency for that Market Participant's senior unsecured debt.

**Grandfathered Agreements (GAs)** is a transaction specified in Section II.45 for the applicable period specified in that Section.

**Grandfathered Intertie Agreement (GIA)** is defined pursuant to the TOA.

**Handy-Whitman Index of Public Utility Construction Costs** is the Total Other Production Plant index shown in the Cost Trends of Electric Utility Construction for the North Atlantic Region as published in the Handy-Whitman Index of Public Utility Construction Costs.

**Highgate Transmission Facilities (HTF)** are existing U. S.-based transmission facilities covered under the Agreement for Joint Ownership, Construction and Operation of the Highgate Transmission Interconnection dated as of August 1, 1984 including (1) the whole of a 200 megawatt high-voltage, back-to-back, direct-current converter facility located in Highgate, Vermont and (2) a 345 kilovolt transmission line within Highgate and Franklin, Vermont (which connects the converter facility at the U.S.-Canadian border to a Hydro-Quebec 120 kilovolt line in Bedford, Quebec). The HTF include any upgrades associated with increasing the capacity or changing the physical characteristics of these facilities as defined in the above stated agreement dated August 1, 1984 until the Operations Date, as defined in the TOA. The current HTF rating is a nominal 225 MW. The HTF are not defined as PTF. Coincident with the Operations Date and except as stipulated in Schedules, 9, 12, and Attachment F to the OATT, HTF shall be treated in the same manner as PTF for purposes of the OATT and all references to PTF in the OATT shall be deemed to apply to HTF as well. The treatment of the HTF is not intended to establish any binding precedent or presumption with regard to the treatment for other transmission facilities within the New England Transmission System (including HVDC, MTF, or Control Area Interties) for purposes of the OATT.

**Host Participant or Host Utility** is a Market Participant or a Governance Participant transmission or distribution provider that reconciles the loads within the metering domain with OP-18 compliant metering.

**Hourly Charges** are defined in Section 1.3 of the ISO New England Billing Policy.

**Hourly Requirements** are determined in accordance with Section III.A(i) of the ISO New England Financial Assurance Policy.

**Hourly Shortfall NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Hub** is a specific set of pre-defined Nodes for which a Locational Marginal Price will be calculated for the Day-Ahead Energy Market and Real-Time Energy Market and which can be used to establish a

reference price for energy purchases and the transfer of Day-Ahead Adjusted Load Obligations and Real-Time Adjusted Load Obligations and for the designation of FTRs.

**Hub Price** is calculated in accordance with Section III.2.8 of Market Rule 1.

**HQ Interconnection Capability Credit (HQICC)** is a monthly value reflective of the annual installed capacity benefits of the Phase I/II HVDC-TF, as determined by the ISO, using a standard methodology on file with the Commission, in conjunction with the setting of the Installed Capacity Requirement. An appropriate share of the HQICC shall be assigned to an IRH if the Phase I/II HVDC-TF support costs are paid by that IRH and such costs are not included in the calculation of the Regional Network Service rate. The share of HQICC allocated to such an eligible IRH for a month is the sum in kilowatts of (1)(a) the IRH's percentage share, if any, of the Phase I Transfer Capability times (b) the Phase I Transfer Credit, plus (2)(a) the IRH's percentage share, if any, of the Phase II Transfer Capability, times (b) the Phase II Transfer Credit. The ISO shall establish appropriate HQICCs to apply for an IRH which has such a percentage share.

**Import Capacity Resource** means an Existing Import Capacity Resource or a New Import Capacity Resource offered to provide capacity in the New England Control Area from an external Control Area.

**Inadvertent Energy Revenue** is defined in Section III.3.2.1(o) of Market Rule 1.

**Inadvertent Energy Revenue Charges or Credits** is defined in Section III.3.2.1(p) of Market Rule 1.

**Inadvertent Interchange** means the difference between net actual energy flow and net scheduled energy flow into or out of the New England Control Area.

**Increment Offer** means an offer to sell energy at a specified Location in the Day-Ahead Energy Market which is not associated with a physical supply. An accepted Increment Offer results in scheduled supply at the specified Location in the Day-Ahead Energy Market.

**Incremental ARR** is an ARR provided in recognition of a participant-funded transmission system upgrade pursuant to Appendix C of this Market Rule.

**Incremental ARR Holder** is an entity which is the record holder of an Incremental Auction Revenue Right in the register maintained by the ISO.

**Incremental Cost of Reliability Service** is described in Section III.13.2.5.2.5.2 of Market Rule 1.

**Independent Transmission Company (ITC)** is a transmission entity that assumes certain responsibilities in accordance with Section 10.05 of the Transmission Operating Agreement and Attachment M to the OATT, subject to the acceptance or approval of the Commission and a finding of the Commission that the transmission entity satisfies applicable independence requirements.

**Information Request** is a request from a potential Disputing Party submitted in writing to the ISO for access to Confidential Information.

**Initial Market Participant Financial Assurance Requirement** is calculated for new Market Participants and Returning Market Participants, other than an FTR-Only Customer or a Governance Only Member, according to Section IV of the ISO New England Financial Assurance Policy.

**Installed Capacity Requirement** means the level of capacity required to meet the reliability requirements defined for the New England Control Area, as described in Section III.12 of Market Rule 1.

**Interchange Transactions** are transactions deemed to be effected under Market Rule 1.

**Interconnecting Transmission Owner** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Interconnection Agreement** is the “Large Generator Interconnection Agreement”, the “Small Generator Interconnection Agreement”, or the “Elective Transmission Upgrade Interconnection Agreement” pursuant to Schedules 22, 23 or 25 of the ISO OATT or an interconnection agreement approved by the Commission prior to the adoption of the Interconnection Procedures.

**Interconnection Customer** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Interconnection Feasibility Study Agreement** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, or Section I of Schedule 25 of the OATT.

**Interconnection Procedure** is the “Large Generator Interconnection Procedures”, the “Small Generator Interconnection Procedures”, or the “Elective Transmission Upgrade Interconnection Procedures” pursuant to Schedules 22, 23, and 25 of the ISO OATT.

**Interconnection Reliability Operating Limit (IROL)** has the meaning specified in the Glossary of Terms Used in NERC Reliability Standards.

**Interconnection Request** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, or Section I of Schedule 25 of the OATT.

**Interconnection Rights Holder(s) (IRH)** has the meaning given to it in Schedule 20A to Section II of this Tariff.

**Interconnection System Impact Study Agreement** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23 and Section I of Schedule 25 of the OATT.

**Interest** is interest calculated in the manner specified in Section II.8.3.

**Interface Bid** is a unified real-time bid to simultaneously purchase and sell energy on each side of an external interface for which the enhanced scheduling procedures in Section III.1.10.7.A are implemented.

**Intermittent Power Resource** is a wind, solar, run of river hydro or other renewable resource that does not have control over its net power output.

**Internal Bilateral for Load** is an internal bilateral transaction under which the buyer receives a reduction in Real-Time Load Obligation and the seller receives a corresponding increase in Real-Time Load Obligation in the amount of the sale, in MWs. An Internal Bilateral for Load transaction is only applicable in the Real-Time Energy Market.

**Internal Bilateral for Market for Energy** is an internal bilateral transaction for Energy which applies in the Day-Ahead Energy Market and Real-Time Energy Market or just the Real-Time Energy Market under

which the buyer receives a reduction in Day-Ahead Adjusted Load Obligation and Real-Time Adjusted Load Obligation and the seller receives a corresponding increase in Day-Ahead Adjusted Load Obligation and Real-Time Adjusted Load Obligation in the amount of the sale, in MWs.

**Internal Elective Transmission Upgrade (Internal ETU)** is defined in Section I of Schedule 25 of the OATT.

**Internal Market Monitor** means the department of the ISO responsible for carrying out the market monitoring and mitigation functions specified in Appendix A and elsewhere in Market Rule 1.

**Interregional Planning Stakeholder Advisory Committee (IPSAC)** is the committee described as such in the Northeast Planning Protocol.

**Interregional Transmission Project** is a transmission project located within the New England Control Area and one or more of the neighboring transmission planning regions.

**Interruption Cost** is the amount, in dollars, that must be paid to a Market Participant each time the Market Participant's Demand Response Resource is scheduled or dispatched in the New England Markets to reduce demand.

**Inventoried Energy Day** is an Operating Day that occurs in the months of December, January, or February during the winters of 2023-2024 and 2024-2025 (inventoried energy program) and for which the average of the high temperature and the low temperature on that Operating Day, as measured and reported by the National Weather Service at Bradley International Airport in Windsor Locks, Connecticut, is less than or equal to 17 degrees Fahrenheit, as described in Section III.K.3.1 of Market Rule 1.

**Investment Grade Rating**, for a Market (other than an FTR-Only Customer) or Non-Market Participant Transmission Customer, is either (a) a corporate investment grade rating from one or more of the Rating Agencies, or (b) if the Market Participant or Non-Market Participant Transmission Customer does not have a corporate rating from one of the Rating Agencies, then an investment grade rating for the Market Participant's or Non-Market Participant Transmission Customer's senior unsecured debt from one or more of the Rating Agencies.



**Invoice** is a statement issued by the ISO for the net Charge owed by a Covered Entity pursuant to the ISO New England Billing Policy.

**Invoice Date** is the day on which the ISO issues an Invoice.

**ISO** means ISO New England Inc.

**ISO Charges**, for the purposes of the ISO New England Billing Policy, are both Non-Hourly Charges and Hourly Charges.

**ISO Control Center** is the primary control center established by the ISO for the exercise of its Operating Authority and the performance of functions as an RTO.

**ISO-Initiated Claimed Capability Audit** is the audit performed pursuant to Section III.1.5.1.4.

**ISO New England Administrative Procedures** means procedures adopted by the ISO to fulfill its responsibilities to apply and implement ISO New England System Rules.

**ISO New England Billing Policy** is Exhibit ID to Section I of the Transmission, Markets and Services Tariff.

**ISO New England Filed Documents** means the Transmission, Markets and Services Tariff, including but not limited to Market Rule 1, the Participants Agreement, the Transmission Operating Agreement or other documents that affect the rates, terms and conditions of service.

**ISO New England Financial Assurance Policy** is Exhibit IA to Section I of the Transmission, Markets and Services Tariff.

**ISO New England Information Policy** is the policy establishing guidelines regarding the information received, created and distributed by Market Participants and the ISO in connection with the settlement, operation and planning of the System, as the same may be amended from time to time in accordance with the provisions of this Tariff. The ISO New England Information Policy is Attachment D to the Transmission, Markets and Services Tariff.

**ISO New England Manuals** are the manuals implementing Market Rule 1, as amended from time to time in accordance with the Participants Agreement. Any elements of the ISO New England Manuals that substantially affect rates, terms, and/or conditions of service shall be filed with the Commission under Section 205 of the Federal Power Act.

**ISO New England Operating Documents** are the Tariff and the ISO New England Operating Procedures.

**ISO New England Operating Procedures (OPs)** are the ISO New England Planning Procedures and the operating guides, manuals, procedures and protocols developed and utilized by the ISO for operating the ISO bulk power system and the New England Markets.

**ISO New England Planning Procedures** are the procedures developed and utilized by the ISO for planning the ISO bulk power system.

**ISO New England System Rules** are Market Rule 1, the ISO New England Information Policy, the ISO New England Administrative Procedures, the ISO New England Manuals and any other system rules, procedures or criteria for the operation of the New England Transmission System and administration of the New England Markets and the Transmission, Markets and Services Tariff.

**ITC Agreement** is defined in Attachment M to the OATT.

**ITC Rate Schedule** is defined in Section 3.1 of Attachment M to the OATT.

**ITC System** is defined in Section 2.2 of Attachment M to the OATT.

**ITC System Planning Procedures** is defined in Section 15.4 of Attachment M to the OATT.

**Joint ISO/RTO Planning Committee (JIPC)** is the committee described as such in the Northeastern Planning Protocol.

**Late Payment Account** is a segregated interest-bearing account into which the ISO deposits Late Payment Charges due from ISO Charges and interest owed from participants for late payments that are collected and not distributed to the Covered Entities, until the Late Payment Account Limit is reached,

under the ISO New England Billing Policy and penalties collected under the ISO New England Financial Assurance Policy.

**Late Payment Account Limit** is defined in Section 4.2 of the ISO New England Billing Policy.

**Late Payment Charge** is defined in Section 4.1 of the ISO New England Billing Policy.

**Lead Market Participant**, for purposes other than the Forward Capacity Market, is the entity authorized to submit Supply Offers, Demand Bids or Demand Reduction Offers for a Resource and to whom certain Energy TUs are assessed under Schedule 2 of Section IV.A of the Tariff. For purposes of the Forward Capacity Market, the Lead Market Participant is the entity designated to participate in that market on behalf of an Existing Capacity Resource or a New Capacity Resource.

**Limited Energy Resource** means a Generator Asset that, due to design considerations, environmental restriction on operations, cyclical requirements, such as the need to recharge or refill or manage water flow, or fuel limitations, are unable to operate continuously at full output on a daily basis.

**Load Asset** means a physical load that has been registered in accordance with the Asset Registration Process. A Load Asset can be an Asset Related Demand, including a Dispatchable Asset Related Demand.

**Load Management** means measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that curtail electrical usage or shift electrical usage while delivering a comparable or acceptable level of end-use service. Such measures include, but are not limited to, energy management systems, load control end-use cycling, load curtailment strategies, and energy storage that curtails or shifts electrical usage by means other than generating electricity.

**Load Shedding** is the systematic reduction of system demand by temporarily decreasing load.

**Load Zone** is a Reliability Region, except as otherwise provided for in Section III.2.7 of Market Rule 1.

**Local Area Facilities** are defined in the TOA.

**Local Benefit Upgrade(s) (LBU)** is an upgrade, modification or addition to the transmission system that is: (i) rated below 115kV or (ii) rated 115kV or above and does not meet all of the non-voltage criteria for PTF classification specified in the OATT.

**Local Control Centers** are those control centers in existence as of the effective date of the OATT (including the CONVEX, REMVEC, Maine and New Hampshire control centers) or established by the PTOs in accordance with the TOA that are separate from the ISO Control Center and perform certain functions in accordance with the OATT and the TOA.

**Local Delivery Service** is the service of delivering electric energy to end users. This service is subject to state jurisdiction regardless of whether such service is provided over local distribution or transmission facilities. An entity that is an Eligible Customer under the OATT is not excused from any requirements of state law, or any order or regulation issued pursuant to state law, to arrange for Local Delivery Service with the Participating Transmission Owner and/or distribution company providing such service and to pay all applicable charges associated with such service, including charges for stranded costs and benefits.

**Local Network** is defined as the transmission facilities constituting a local network as identified in Attachment E, as such Attachment may be modified from time to time in accordance with the Transmission Operating Agreement.

**Local Network Load** is the load that a Network Customer designates for Local Network Service under Schedule 21 to the OATT.

**Local Network RNS Rate** is the rate applicable to Regional Network Service to effect a delivery to load in a particular Local Network, as determined in accordance with Schedule 9 to the OATT.

**Local Network Service (LNS)** is the network service provided under Schedule 21 and the Local Service Schedules to permit the Transmission Customer to efficiently and economically utilize its resources to serve its load.

**Local Point-To-Point Service (LPTP)** is Point-to-Point Service provided under Schedule 21 of the OATT and the Local Service Schedules to permit deliveries to or from an interconnection point on the PTF.

**Local Public Policy Transmission Upgrade** is any addition and/or upgrade to the New England Transmission System with a voltage level below 115kV that is required in connection with the construction of a Public Policy Transmission Upgrade approved for inclusion in the Regional System Plan pursuant to Attachment K to the ISO OATT or included in a Local System Plan in accordance with Appendix 1 to Attachment K.

**Local Resource Adequacy Requirement** is calculated pursuant to Section III.12.2.1.1.

**Local Second Contingency Protection Resources** are those Resources identified by the ISO on a daily basis as necessary for the provision of Operating Reserve requirements and adherence to NERC, NPCC and ISO reliability criteria over and above those Resources required to meet first contingency reliability criteria within a Reliability Region.

**Local Service** is transmission service provided under Schedule 21 and the Local Service Schedules thereto.

**Local Service Schedule** is a PTO-specific schedule to the OATT setting forth the rates, charges, terms and conditions applicable to Local Service.

**Local Sourcing Requirement (LSR)** is a value calculated as described in Section III.12.2.1 of Market Rule 1.

**Local System Planning (LSP)** is the process defined in Appendix 1 of Attachment K to the OATT.

**Localized Costs** are costs that the ISO, with advisory input from the Reliability Committee, determines in accordance with Schedule 12C of the OATT shall not be included in the Pool-Supported PTF costs recoverable under this OATT, or in costs allocated to Regional Network Load according to Section 6 of Schedule 12. If there are any Localized Costs, the ISO shall identify them in the Regional System Plan.

**Location** is a Node, External Node, Load Zone, DRR Aggregation Zone, or Hub.

**Locational Marginal Price (LMP)** is defined in Section III.2 of Market Rule 1. The Locational Marginal Price for a Node is the nodal price at that Node; the Locational Marginal Price for an External Node is the nodal price at that External Node; the Locational Marginal Price for a Load Zone, DRR

Aggregation Zone or Reliability Region is the Zonal Price for that Load Zone, DRR Aggregation Zone or Reliability Region, respectively; and the Locational Marginal Price for a Hub is the Hub Price for that Hub.

**Long Lead Time Facility (Long Lead Facility)** has the meaning specified in Section I of Schedule 22 and Schedule 25 of the OATT.

**Long-Term** is a term of one year or more.

**Long-Term Transmission Outage** is a long-term transmission outage scheduled in accordance with ISO New England Operating Procedure No. 3.

**Longer-Term Transmission Study** is a study conducted by the ISO pursuant to the process set out in Section 16 of Attachment K of the OATT. The 2050 Transmission Study shall be the first Longer-Term Transmission Study.

**Loss Component** is the component of the nodal LMP at a given Node or External Node on the PTF that reflects the cost of losses at that Node or External Node relative to the reference point. The Loss Component of the nodal LMP at a given Node on the non-PTF system reflects the relative cost of losses at that Node adjusted as required to account for losses on the non-PTF system already accounted for through tariffs associated with the non-PTF. When used in connection with Hub Price or Zonal Price, the term Loss Component refers to the Loss Components of the nodal LMPs that comprise the Hub Price or Zonal Price, which Loss Components are averaged or weighted in the same way that nodal LMPs are averaged to determine Hub Price or weighted to determine Zonal Price.

**Loss of Load Expectation (LOLE)** is the probability of disconnecting non-interruptible customers due to a resource deficiency.

**Lost Opportunity Cost (LOC)** is one of four forms of compensation that may be paid to resources providing VAR Service under Schedule 2 of the OATT.

**LSE** means load serving entity.

**Lump Sum Blackstart Payment** is defined and calculated as specified in Section 5.4 of Schedule 16 to the OATT.

**Lump Sum Blackstart Capital Payment** is defined and calculated as specified in Section 5.4 of Schedule 16 to the OATT.

**Manual Response Rate** is the rate, in MW/Minute, at which the output of a Generator Asset, or the consumption of a Dispatchable Asset Related Demand, is capable of changing.

**Marginal Loss Revenue Load Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Marginal Reliability Impact** is the change, with respect to an increment of capacity supply, in expected unserved energy due to resource deficiency, as measured in hours per year.

**Market Credit Limit** is a credit limit for a Market Participant's Financial Assurance Obligations (except FTR Financial Assurance Requirements) established for each Market Participant in accordance with Section II.C of the ISO New England Financial Assurance Policy.

**Market Credit Test Percentage** is calculated in accordance with Section III.B.1(a) of the ISO New England Financial Assurance Policy.

**Market Efficiency Needs Scenario** is an Economic Study reference scenario that is described in Section 17.2(b) of Attachment K to the OATT.

**Market Efficiency Transmission Upgrade** is defined as those additions and upgrades that are not related to the interconnection of a generator, and, in the ISO's determination, are designed to reduce bulk power system costs to load system-wide, where the net present value of the reduction in bulk power system costs to load system-wide exceeds the net present value of the cost of the transmission addition or upgrade. For purposes of this definition, the term "bulk power system costs to load system-wide" includes, but is not limited to, the costs of energy, capacity, reserves, losses and impacts on bilateral prices for electricity.

**Market Participant** is a participant in the New England Markets (including a FTR-Only Customer) that has executed a Market Participant Service Agreement, or on whose behalf an unexecuted Market Participant Service Agreement has been filed with the Commission.

**Market Participant Financial Assurance Requirement** is defined in Section III of the ISO New England Financial Assurance Policy.

**Market Participant Service Agreement (MPSA)** is an agreement between the ISO and a Market Participant, in the form specified in Attachment A or Attachment A-1 to the Tariff, as applicable.

**Market Rule 1** is ISO Market Rule 1 and appendices set forth in Section III of this ISO New England Inc. Transmission, Markets and Services Tariff, as it may be amended from time to time.

**Market Violation** is a tariff violation, violation of a Commission-approved order, rule or regulation, market manipulation, or inappropriate dispatch that creates substantial concerns regarding unnecessary market inefficiencies.

**Material Adverse Change** is any change in financial status including, but not limited to a downgrade to below an Investment Grade Rating by any Rating Agency, being placed on credit watch with negative implication by any Rating Agency if the Market Participant or Non-Market Participant Transmission Customer does not have an Investment Grade Rating, a bankruptcy filing or other insolvency, a report of a significant quarterly loss or decline of earnings, the resignation of key officer(s), the sanctioning of the Market Participant or Non-Market Participant Transmission Customer or any of its Principles imposed by the Federal Energy Regulatory Commission, the Securities Exchange Commission, any exchange monitored by the National Futures Association, or any state entity responsible for regulating activity in energy markets; the filing of a material lawsuit that could materially adversely impact current or future financial results; a significant change in the Market Participant's or Non-Market Participant Transmission Customer's credit default spreads; or a significant change in market capitalization.

**Material Adverse Impact** is defined, for purposes of review of ITC-proposed plans, as a proposed facility or project will be deemed to cause a "material adverse impact" on facilities outside of the ITC System if: (i) the proposed facility or project causes non-ITC facilities to exceed their capabilities or exceed their thermal, voltage or stability limits, consistent with all applicable reliability criteria, or (ii) the proposed facility or project would not satisfy the standards set forth in Section I.3.9 of the Transmission,



Markets and Services Tariff. This standard is intended to assure the continued service of all non-ITC firm load customers and the ability of the non-ITC systems to meet outstanding transmission service obligations.

**Maximum Capacity Limit** is a value calculated as described in Section III.12.2.2 of Market Rule 1.

**Maximum Consumption Limit** is the maximum amount, in MW, available for economic dispatch from a DARD and is based on the physical characteristics as submitted as part of the DARD's Offer Data. A Market Participant must maintain an up-to-date Maximum Consumption Limit (and where applicable, must provide the ISO with any telemetry required by ISO New England Operating Procedure No. 18 to allow the ISO to maintain an updated Maximum Consumption Limit) for all hours in which a DARD has been offered into the Day-Ahead Energy Market or Real-Time Energy Market.

**Maximum Daily Consumption Limit** is the maximum amount of megawatt-hours that a Storage DARD expects to be able to consume in the next Operating Day.

**Maximum Facility Load** is the highest demand of an end-use customer facility since the start of the prior calendar year (or, if unavailable, an estimate thereof), where the demand evaluated is established by adding metered demand measured at the Retail Delivery Point and the output of all generators located behind the Retail Delivery Point in the same time intervals.

**Maximum Interruptible Capacity** is an estimate of the maximum demand reduction and Net Supply that a Demand Response Asset can deliver, as measured at the Retail Delivery Point.

**Maximum Load** is the highest demand since the start of the prior calendar year (or, if unavailable, an estimate thereof), as measured at the Retail Delivery Point.

**Maximum Number of Daily Starts** is the maximum number of times that a Binary Storage DARD or a Generator Asset can be started or that a Demand Response Resource can be interrupted in the next Operating Day under normal operating conditions.

**Maximum Reduction** is the maximum available demand reduction, in MW, of a Demand Response Resource that a Market Participant offers to deliver in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the Demand Response Resource's Demand Reduction Offer.

**Measure Life** is the estimated time an On-Peak Demand Resource or Seasonal Peak Demand Resource measure will remain in place, or the estimated time period over which the facility, structure, equipment or system in which a measure is installed continues to exist, whichever is shorter. Suppliers of On-Peak Demand Resources or Seasonal Peak Demand Resources comprised of an aggregation of measures with varied Measures Lives shall determine and document the Measure Life either: (i) for each type of measure with a different Measure Life and adjust the aggregate performance based on the individual measure life calculation in the portfolio; or (ii) as the average Measure Life for the aggregated measures as long as the demand reduction capability of the resource is greater than or equal to the amount that cleared in the Forward Capacity Auction or reconfiguration auction for the entire Capacity Commitment Period, and the demand reduction capability for an Existing On-Peak Demand Resource or Existing Seasonal Peak Demand Resource is not over-stated in a subsequent Capacity Commitment Period. Measure Life shall be determined consistent with the resource's Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements of Market Rule 1 and the ISO New England Manuals.

**Measurement and Verification Documents** mean the measurement and verification documents described in Section 13.1.4.3.1 of Market Rule 1 that are submitted by On-Peak Demand Resources and Seasonal Peak Demand Resources, which include Measurement and Verification Plans, Updated Measurement and Verification Plans, Measurement and Verification Summary Reports, and Measurement and Verification Reference Reports.

**Measurement and Verification Plan** means the measurement and verification plan submitted by an On-Peak Demand Resource or Seasonal Peak Demand Resource as part of the qualification process for the Forward Capacity Auction pursuant to the requirements of Section III.13.1.4.3 of Market Rule 1 and the ISO New England Manuals.

**Measurement and Verification Reference Reports** are optional reports submitted by On-Peak Demand Resources or Seasonal Peak Demand Resources during the Capacity Commitment Period subject to the schedule in the Measurement and Verification Plan and consistent with the schedule and reporting standards set forth in the ISO New England Manuals. Measurement and Verification Reference Reports update the prospective demand reduction capability of the On-Peak Demand Resource or Seasonal Peak Demand Resource project based on measurement and verification studies performed during the Capacity Commitment Period.

**Measurement and Verification Summary Report** is the monthly report submitted by an On-Peak Demand Resource or Seasonal Peak Demand Resource with the monthly settlement report for the Forward Capacity Market, which documents the total demand reduction capability for all On-Peak Demand Resources and Seasonal Peak Demand Resources in operation as of the end of the previous month.

**MEPCO Grandfathered Transmission Service Agreement (MGTSA)** is a MEPCO long-term firm point-to-point transmission service agreement with a POR or POD at the New Brunswick border and a start date prior to June 1, 2007 where the holder has elected, by written notice delivered to MEPCO within five (5) days following the filing of the settlement agreement in Docket Nos. ER07-1289 and EL08-56 or by September 1, 2008 (whichever is later), MGTSA treatment as further described in Section II.45.1.

**Merchant Transmission Facilities (MTF)** are the transmission facilities owned by MTOs, defined and classified as MTF pursuant to Schedule 18 of the OATT, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in a MTOA or Attachment K to the OATT, rated 69 kV or above and required to allow energy from significant power sources to move freely on the New England Transmission System.

**Merchant Transmission Facilities Provider (MTF Provider)** is an entity as defined in Schedule 18 of the OATT.

**Merchant Transmission Facilities Service (MTF Service)** is transmission service over MTF as provided for in Schedule 18 of the OATT.

**Merchant Transmission Operating Agreement (MTOA)** is an agreement between the ISO and an MTO with respect to its MTF.

**Merchant Transmission Owner (MTO)** is an owner of MTF.

**Meter Data Error** means an error in meter data, including an error in Coincident Peak Contribution values, on an Invoice issued by the ISO after the completion of the Data Reconciliation Process as described in the ISO New England Manuals and in Section III.3.8 of Market Rule 1.

**Meter Data Error RBA Submission Limit** means the date thirty 30 calendar days after the issuance of the Invoice containing the results of the Data Reconciliation Process as described in the ISO New England Manuals and in Section III.3.6 of Market Rule 1.

**Metered Quantity For Settlement** is defined in Section III.3.2.1.1 of Market Rule 1.

**Minimum Consumption Limit** is (a) the lowest consumption level, in MW, available for economic dispatch from a DARD and is based on the physical characteristics as submitted as part of the DARD's Offer Data, and (b) for a DARD undergoing Facility and Equipment Testing or auditing, the level to which the DARD requests and is approved to operate or is directed to operate for purposes of completing the Facility and Equipment Testing or auditing.

**Minimum Down Time** is the number of hours that must elapse after a Generator Asset or Storage DARD has been released for shutdown at or below its Economic Minimum Limit or Minimum Consumption Limit before the Generator Asset or Storage DARD can be brought online and be released for dispatch at its Economic Minimum Limit or Minimum Consumption Limit.

**Minimum Generation Emergency** means an Emergency declared by the ISO in which the ISO anticipates requesting one or more Generator Assets to operate at or below Economic Minimum Limit in order to manage, alleviate, or end the Emergency.

**Minimum Generation Emergency Credits** are those Real-Time Dispatch NCPC Credits calculated pursuant to Appendix F of Market Rule 1 for resources within a reliability region that are dispatched during a period for which a Minimum Generation Emergency has been declared.

**Minimum Reduction** is the minimum available demand reduction, in MW, of a Demand Response Resource that a Market Participant offers to deliver in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the Demand Response Resource's Demand Reduction Offer.

**Minimum Reduction Time** is the minimum number of hours of demand reduction at or above the Minimum Reduction for which the ISO must dispatch a Demand Response Resource to reduce demand.

**Minimum Run Time** is the number of hours that a Generator Asset must remain online after it has been scheduled to reach its Economic Minimum Limit before it can be released for shutdown from its Economic Minimum Limit or the number of hours that must elapse after a Storage DARD has been scheduled to consume at its Minimum Consumption Limit before it can be released for shutdown.

**Minimum Time Between Reductions** is the number of hours that must elapse after a Demand Response Resource has received a Dispatch Instruction to stop reducing demand before the Demand Response Resource can achieve its Minimum Reduction after receiving a Dispatch Instruction to start reducing demand.

**Minimum Total Reserve Requirement**, which does not include Replacement Reserve, is the combined amount of TMSR, TMNSR, and TMOR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Monthly Blackstart Service Charge** is the charge made to Transmission Customers pursuant to Section 6 of Schedule 16 to the OATT.

**Monthly Capacity Payment** is the Forward Capacity Market payment described in Section III.13.7.3 of Market Rule 1.

**Monthly Peak** is defined in Section II.21.2 of the OATT.

**Monthly Real-Time Demand Reduction Obligation** is the absolute value of a Customer's hourly Real-Time Demand Reduction Obligation summed for all hours in a month, in MWhs.

**Monthly Real-Time Generation Obligation** is the sum, for all hours in a month, at all Locations, of a Customer's Real-Time Generation Obligation, in MWhs.

**Monthly Real-Time Load Obligation** is the absolute value of a Customer's hourly Real-Time Load Obligation summed for all hours in a month, in MWhs.

**Monthly Regional Network Load** is defined in Section II.21.2 of the OATT.

**Monthly Statement** is the first weekly Statement issued on a Monday after the ninth of a calendar month that includes both the Hourly Charges for the relevant billing period and Non-Hourly Charges for the immediately preceding calendar month.

**MRI Transition Period** is the period specified in Section III.13.2.2.1.

**MUI** is the market user interface.

**Municipal Market Participant** is defined in Section II of the ISO New England Financial Assurance Policy.

**MW** is megawatt.

**MWh** is megawatt-hour.

**Native Load Customers** are the wholesale and retail power customers of a Transmission Owner on whose behalf the Transmission Owner, by statute, franchise, regulatory requirement, or contract, has undertaken an obligation to construct and operate its system to meet the reliable electric needs of such customers.

**NCPC Charge** means the charges to Market Participants calculated pursuant to Appendix F to Market Rule 1.

**NCPC Credit** means the credits to Market Participants calculated pursuant to Appendix F to Market Rule 1.

**Needs Assessment** is defined in Section 4.1 of Attachment K to the OATT.

**NEMA**, for purposes of Section III of the Tariff, is the Northeast Massachusetts Reliability Region.

**NEMA Contract** is a contract described in Appendix C of Market Rule 1 and listed in Exhibit 1 of Appendix C of Market Rule 1.

**NEMA Load Serving Entity (NEMA LSE)** is a Transmission Customer or Congestion Paying LSE Entity that serves load within NEMA.

**NEMA or Northeast Massachusetts Upgrade**, for purposes of Section II of the Tariff, is an addition to or modification of the PTF into or within the Northeast Massachusetts Reliability Region that was not, as of December 31, 1999, the subject of a System Impact Study or application filed pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff; that is not related to generation interconnections; and that will be completed and placed in service by June 30, 2004. Such upgrades include, but are not limited to, new transmission facilities and related equipment and/or modifications to existing transmission facilities and related equipment. The list of NEMA Upgrades is contained in Schedule 12A of the OATT.

**NEPOOL** is the New England Power Pool, and the entities that collectively participated in the New England Power Pool.

**NEPOOL Agreement** is the agreement among the participants in NEPOOL.

**NEPOOL GIS** is the generation information system.

**NEPOOL GIS Administrator** is the entity or entities that develop, administer, operate and maintain the NEPOOL GIS.

**NEPOOL GIS API Fees** are the one-time on-boarding fees and annual maintenance fees charged to NEPOOL by the NEPOOL GIS Administrator for each NEPOOL Participant or Market Participant that accesses the NEPOOL GIS through an application programming interface pursuant to Rule 3.9(b) of the operating rules of the NEPOOL GIS.

**NEPOOL Participant** is a party to the NEPOOL Agreement.

**NERC** is the North American Electric Reliability Corporation or its successor organization.

**NESCOE** is the New England States Committee on Electricity, recognized by the Commission as the regional state committee for the New England Control Area.

**Net Commitment Period Compensation (NCPC)** is the compensation methodology for Resources that is described in Appendix F to Market Rule 1.

**Net CONE** is an estimate of the Cost of New Entry, net of non-capacity market revenues, for a reference technology resource type and is intended to equal the amount of capacity revenue the reference technology resource would require to be economically viable given reasonable expectations of the energy and ancillary services revenues under long-term equilibrium conditions.

**Net Regional Clearing Price** is described in Section III.13.7.5 of Market Rule 1.

**Net Supply** is energy injected into the transmission or distribution system at a Retail Delivery Point.

**Net Supply Capability** is the maximum Net Supply a facility is physically and contractually able to inject into the transmission or distribution system at its Retail Delivery Point.

**Network Capability Interconnection Standard** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Network Customer** is a Transmission Customer receiving RNS or LNS.

**Network Import Capability (NI Capability)** is defined in Section I of Schedule 25 of the OATT.

**Network Import Interconnection Service (NI Interconnection Service)** is defined in Section I of Schedule 25 of the OATT.

**Network Resource** is defined as follows: (1) With respect to Market Participants, (a) any generating resource located in the New England Control Area which has been placed in service prior to the Compliance Effective Date (including a unit that has lost its capacity value when its capacity value is restored and a deactivated unit which may be reactivated without satisfying the requirements of Section II.46 of the OATT in accordance with the provisions thereof) until retired; (b) any generating resource located in the New England Control Area which is placed in service after the Compliance Effective Date until retired, provided that (i) the Generator Owner has complied with the requirements of Sections II.46 and II.47 and Schedules 22 and 23 of the OATT, and (ii) the output of the unit shall be limited in accordance with Sections II.46 and II.47 and Schedules 22 and 23, if required; and (c) any generating



resource or combination of resources (including bilateral purchases) located outside the New England Control Area for so long as any Market Participant has an Ownership Share in the resource or resources which is being delivered to it in the New England Control Area to serve Regional Network Load located in the New England Control Area or other designated Regional Network Loads contemplated by Section II.18.3 of the OATT taking Regional Network Service. (2) With respect to Non-Market Participant Transmission Customers, any generating resource owned, purchased or leased by the Non-Market Participant Transmission Customer which it designates to serve Regional Network Load.

**New Brunswick Security Energy** is defined in Section III.3.2.6A of Market Rule 1.

**New Capacity Offer** is an offer in the Forward Capacity Auction to provide capacity from a New Generating Capacity Resource, New Import Capacity Resource or New Demand Capacity Resource.

**New Capacity Qualification Deadline** is a deadline, specified in Section III.13.1.10 of Market Rule 1, for submission of certain qualification materials for the Forward Capacity Auction, as discussed in Section III.13.1 of Market Rule 1.

**New Capacity Qualification Package** is information submitted by certain new resources prior to participation in the Forward Capacity Auction, as described in Section III.13.1 of Market Rule 1.

**New Capacity Resource** is a resource (i) that never previously received any payment as a capacity resource including any capacity payment pursuant to the market rules in effect prior to June 1, 2010 and that has not cleared in any previous Forward Capacity Auction; or (ii) that is otherwise eligible to participate in the Forward Capacity Auction as a New Capacity Resource.

**New Capacity Show of Interest Form** is described in Section III.13.1.1.2.1 of Market Rule 1.

**New Capacity Show of Interest Submission Window** is the period of time during which a Project Sponsor may submit a New Capacity Show of Interest Form or a New Demand Capacity Resource Show of Interest Form, as described in Section III.13.1.10 of Market Rule 1.

**New Demand Capacity Resource** is a type of Demand Capacity Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.1 of Market Rule 1.

**New Demand Capacity Resource Qualification Package** is the information that a Project Sponsor must submit, in accordance with Section III.13.1.4.1.1.2 of Market Rule 1, for each resource that it seeks to offer in the Forward Capacity Auction as a New Demand Capacity Resource.

**New Demand Capacity Resource Show of Interest Form** is described in Section III.13.1.4.1.1.1 of Market Rule 1.

**New England Control Area** is the Control Area for New England, which includes PTF, Non-PTF, MTF and OTF. The New England Control Area covers Connecticut, Rhode Island, Massachusetts, New Hampshire, Vermont, and part of Maine (i.e., excluding the portions of Northern Maine and the northern portion of Eastern Maine which are in the Maritimes Control Area).

**New England Markets** are markets or programs for the purchase of energy, capacity, ancillary services, demand response services or other related products or services (including Financial Transmission Rights) that are delivered through or useful to the operation of the New England Transmission System and that are administered by the ISO pursuant to rules, rates, or agreements on file from time to time with the Federal Energy Regulatory Commission.

**New England System Restoration Plan** is the plan that is developed by ISO, in accordance with NERC Reliability Standards, NPCC regional criteria and standards, ISO New England Operating Documents and ISO operating agreements, to facilitate the restoration of the New England Transmission System following a partial or complete shutdown of the New England Transmission System.

**New England Transmission System** is the system of transmission facilities, including PTF, Non-PTF, OTF and MTF, within the New England Control Area under the ISO's operational jurisdiction.

**New Generating Capacity Resource** is a type of resource participating in the Forward Capacity Market, as described in Section III.13.1.1.1 of Market Rule 1.

**New Import Capacity Resource** is a type of resource participating in the Forward Capacity Market, as defined in Section III.13.1.3.4 of Market Rule 1.

**New Resource Offer Floor Price** is defined in Section III.A.21.2.

**NMPTC** means Non-Market Participant Transmission Customer.

**NMPTC Credit Threshold** is described in Section V.A.2 of the ISO New England Financial Assurance Policy.

**NMPTC Financial Assurance Requirement** is an amount of additional financial assurance for Non-Market Participant Transmission Customers described in Section V.D of the ISO New England Financial Assurance Policy.

**Node** is a point on the New England Transmission System at which LMPs are calculated.

**No-Load Fee** is the amount, in dollars per hour, for a Generator Asset that must be paid to Market Participants with an Ownership Share in the Generator Asset for being scheduled in the New England Markets, in addition to the Start-Up Fee and price offered to supply energy, for each hour that the Generator Asset is scheduled in the New England Markets.

**Nominated Consumption Limit** is the consumption level specified by the Market Participant for a Dispatchable Asset Related Demand as adjusted in accordance with the provisions of Section III.13.7.5.1.3.

**Non-Commercial Capacity** is the capacity of a New Capacity Resource or an Existing Capacity Resource, or portion thereof, that has not achieved FCM Commercial Operation.

**Non-Commercial Capacity Cure Period** is the time period described in Section VII.D of the ISO New England Financial Assurance Policy.

**Non-Commercial Capacity Financial Assurance Amount (Non-Commercial Capacity FA Amount)** is the financial assurance amount held on Non-Commercial Capacity cleared in a Forward Capacity Auction as calculated in accordance with Section VII.B.2 of the ISO New England Financial Assurance Policy.

**Non-Designated Blackstart Resource Study Cost Payments** are the study costs reimbursed under Section 5.3 of Schedule 16 of the OATT.

**Non-Dispatchable Resource** is any Resource that does not meet the requirements to be a Dispatchable Resource.

**Non-Hourly Charges** are defined in Section 1.3 of the ISO New England Billing Policy.

**Non-Hourly Requirements** are determined in accordance with Section III.A(ii) of the ISO New England Financial Assurance Policy, which is Exhibit 1A of Section I of the Tariff.

**Non-Incumbent Transmission Developer** is a Qualified Transmission Project Sponsor that: (i) is not currently a PTO; (ii) has a transmission project listed in the RSP Project List; and (iii) has executed a Non-Incumbent Transmission Developer Operating Agreement. “Non-Incumbent Transmission Developer” also includes a PTO that proposes the development of a transmission facility not located within or connected to its existing electric system; however, because such a PTO is a party to the TOA, it is not required to enter into a Non-Incumbent Transmission Developer Operating Agreement.

**Non-Incumbent Transmission Developer Operating Agreement (or NTDOA)** is an agreement between the ISO and a Non-Incumbent Transmission Developer in the form specified in Attachment O to the OATT that sets forth their respective rights and responsibilities to each other with regard to proposals for and construction of certain transmission facilities.

**Non-Market Participant** is any entity that is not a Market Participant.

**Non-Market Participant Transmission Customer** is any entity which is not a Market Participant but is a Transmission Customer.

**Non-Municipal Market Participant** is defined in Section II of the ISO New England Financial Assurance Policy.

**Non-PTF Transmission Facilities (Non-PTF)** are the transmission facilities owned by the PTOs that do not constitute PTF, OTF or MTF.

**Non-Qualifying** means a Market Participant that is not a Credit Qualifying Market Participant.

**Notice of RBA** is defined in Section 6.3.2 of the ISO New England Billing Policy.

**Notification Time** is the time required for a Generator Asset to synchronize to the system from the time a startup Dispatch Instruction is received from the ISO.

**Northeastern Planning Protocol** is the Amended and Restated Northeastern ISO/RTO Planning Coordination Protocol on file with the Commission and posted on the ISO website at the following URL: [www.iso-ne.com/static-assets/documents/2015/07/northeastern\\_protocol\\_dmeast.doc](http://www.iso-ne.com/static-assets/documents/2015/07/northeastern_protocol_dmeast.doc).

**NPCC** is the Northeast Power Coordinating Council.

**Obligation Month** means a time period of one calendar month for which capacity payments are issued and the costs associated with capacity payments are allocated.

**Offer Data** means the scheduling, operations planning, dispatch, new Resource, and other data, including Generator Asset, Dispatchable Asset Related Demand, and Demand Response Resource operating limits based on physical characteristics, and information necessary to schedule and dispatch Generator Assets, Dispatchable Asset Related Demands, and Demand Response Resources for the provision or consumption of energy, the provision of other services, and the maintenance of the reliability and security of the transmission system in the New England Control Area, and specified for submission to the New England Markets for such purposes by the ISO.

**Offer Review Trigger Prices** are the prices specified in Section III.A.21.1 of Market Rule 1 associated with the submission of New Capacity Offers in the Forward Capacity Auction.

**Offered CLAIM10** is a Supply Offer value or a Demand Reduction Offer value between 0 and the CLAIM10 of the resource that represents the amount of TMNSR available either from an off-line Fast Start Generator or from a Fast Start Demand Response Resource that has not been dispatched.

**Offered CLAIM30** is a Supply Offer value or a Demand Reduction Offer value between 0 and the CLAIM30 of the resource that represents the amount of TMOR available either from an off-line Fast Start Generator or from a Fast Start Demand Response Resource that has not been dispatched.

**On-Peak Demand Resource** is a type of Demand Capacity Resource and means installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that reduce the total amount of electrical energy consumed during Demand Resource On-Peak Hours, while delivering a comparable or acceptable level of end-use service. Such measures include Energy Efficiency, Load Management, and Distributed Generation.

**Open Access Same-Time Information System (OASIS)** is the ISO information system and standards of conduct responding to requirements of 18 C.F.R. §37 of the Commission's regulations and all additional requirements implemented by subsequent Commission orders dealing with OASIS.

**Open Access Transmission Tariff (OATT)** is Section II of the ISO New England Inc. Transmission, Markets and Services Tariff.

**Operating Authority** is defined pursuant to a MTOA, an OTOA, the TOA or the OATT, as applicable.

**Operating Data** means GADS Data, data equivalent to GADS Data, CARL Data, metered load data, or actual system failure occurrences data, all as described in the ISO New England Operating Procedures.

**Operating Day** means the calendar day period beginning at midnight for which transactions on the New England Markets are scheduled.

**Operating Reserve** means Ten-Minute Spinning Reserve (TMSR), Ten-Minute Non-Spinning Reserve (TMNSR) and Thirty-Minute Operating Reserve (TMOR).

**Operations Date** is February 1, 2005.

**OTF Service** is transmission service over OTF as provided for in Schedule 20.

**Other Transmission Facility (OTF)** are the transmission facilities owned by Transmission Owners, defined and classified as OTF pursuant to Schedule 20, over which the ISO shall exercise Operating Authority in accordance with the terms set forth in the OTOA, rated 69 kV or above, and required to allow energy from significant power sources to move freely on the New England Transmission System. OTF classification shall be limited to the Phase I/II HVDC-TF.

**Other Transmission Operating Agreements (OTOA)** is the agreement(s) between the ISO, an OTO and/or the associated service provider(s) with respect to an OTF, which includes the HVDC Transmission Operating Agreement and the Phase I/II HVDC-TF Transmission Service Administration Agreement. With respect to the Phase I/II HVDC-TF, the HVDC Transmission Operating Agreement covers the rights and responsibilities for the operation of the facility and the Phase I/II HVDC-TF Transmission Service Administration Agreement covers the rights and responsibilities for the administration of transmission service.

**Other Transmission Owner (OTO)** is an owner of OTF.

**Ownership Share** is a right or obligation, for purposes of settlement, to a percentage share of all credits or charges associated with a Generator Asset or a Load Asset, where such facility is interconnected to the New England Transmission System.

**Participant Expenses** are defined in Section 1 of the Participants Agreement.

**Participant Required Balance** is defined in Section 5.3 of the ISO New England Billing Policy.

**Participant Vote** is defined in Section 1 of the Participants Agreement.

**Participants Agreement** is the agreement among the ISO, the New England Power Pool and Individual Participants, as amended from time to time, on file with the Commission.

**Participants Committee** is the principal committee referred to in the Participants Agreement.

**Participating Transmission Owner (PTO)** is a transmission owner that is a party to the TOA.

**Passive DR Audit** is the audit performed pursuant to Section III.13.6.1.5.4.

**Passive DR Auditing Period** is the summer Passive DR Auditing Period (June 1 to August 31) or winter Passive DR Auditing Period (December 1 to January 31) applicable to On-Peak Demand Resources and Seasonal Peak Demand Resources.

**Payment** is a sum of money due to a Covered Entity from the ISO.

**Payment Default Shortfall Fund** is defined in Section 5.1 of the ISO New England Billing Policy.

**Permanent De-list Bid** is a bid that may be submitted by an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Capacity Resource in the Forward Capacity Auction to permanently remove itself from the capacity market, as described in Section III.13.1.2.3.1.5 of Market Rule 1.

**Phase I Transfer Credit** is 40% of the HQICC, or such other fraction of the HQICC as the ISO may establish.

**Phase I/II HVDC-TF** is defined in Schedule 20A to Section II of this Tariff.

**Phase I/II HVDC-TF Transfer Capability** is the transfer capacity of the Phase I/II HVDC-TF under normal operating conditions, as determined in accordance with Good Utility Practice. The “Phase I Transfer Capability” is the transfer capacity under normal operating conditions, as determined in accordance with Good Utility Practice, of the Phase I terminal facilities as determined initially as of the time immediately prior to Phase II of the Phase I/II HVDC-TF first being placed in service, and as adjusted thereafter only to take into account changes in the transfer capacity which are independent of any effect of Phase II on the operation of Phase I. The “Phase II Transfer Capability” is the difference between the Phase I/II HVDC-TF Transfer Capability and the Phase I Transfer Capability. Determinations of, and any adjustment in, Phase I/II HVDC-TF Transfer Capability shall be made by the ISO, and the basis for any such adjustment shall be explained in writing and posted on the ISO website.

**Phase One Proposal** is a first round submission, as defined in Section 4.3 of Attachment K of the OATT, of a proposal for a Reliability Transmission Upgrade or Market Efficiency Transmission Upgrade, as applicable, by a Qualified Transmission Project Sponsor.

**Phase II Transfer Credit** is 60% of the HQICC, or such other fraction of the HQICC as the ISO may establish.

**Phase Two Solution** is a second round submission, as defined in Section 4.3 of Attachment K of the OATT, of a proposal for a Reliability Transmission Upgrade or Market Efficiency Transmission Upgrade by a Qualified Transmission Project Sponsor.



**Planning Advisory Committee** is the committee described in Attachment K of the OATT.

**Planning and Reliability Criteria** is defined in Section 3.3 of Attachment K to the OATT.

**Planning Authority** is an entity defined as such by the North American Electric Reliability Corporation.

**Point(s) of Delivery (POD)** is point(s) of interconnection where capacity and/or energy transmitted by a Transmission Customer will be made available to the Receiving Party under the OATT.

**Point of Interconnection** shall have the same meaning as that used for purposes of Schedules 22, 23 and 25 of the OATT.

**Point(s) of Receipt (POR)** is point(s) of interconnection where capacity and/or energy transmitted by a Transmission Customer will be made available by the Delivering Party under the OATT.

**Point-To-Point Service** is the transmission of capacity and/or energy on either a firm or non-firm basis from the Point(s) of Receipt to the Point(s) of Delivery under the OATT pursuant to Local Point-To-Point Service or OTF Service or MTF Service; and the transmission of capacity and/or energy from the Point(s) of Receipt to the Point(s) of Delivery under the OATT pursuant to Through or Out Service.

**Policy Scenario** is an Economic Study reference scenario that is described in Section 17.2(c) of Attachment K to the OATT.

**Pool-Planned Unit** is one of the following units: New Haven Harbor Unit 1 (Coke Works), Mystic Unit 7, Canal Unit 2, Potter Unit 2, Wyman Unit 4, Stony Brook Units 1, 1A, 1B, 1C, 2A and 2B, Millstone Unit 3, Seabrook Unit 1 and Waters River Unit 2 (to the extent of 7 megawatts of its Summer capability and 12 megawatts of its Winter capability).

**Pool PTF Rate** is the transmission rate determined in accordance with Schedule 8 to the OATT.

**Pool RNS Rate** is the transmission rate determined in accordance with paragraph (2) of Schedule 9 of Section II of the Tariff.

**Pool-Scheduled Resources** are described in Section III.1.10.2 of Market Rule 1.

**Pool Supported PTF** is defined as: (i) PTF first placed in service prior to January 1, 2000; (ii) Generator Interconnection Related Upgrades with respect to Category A and B projects (as defined in Schedule 11), but only to the extent not paid for by the interconnecting Generator Owner; and (iii) other PTF upgrades, but only to the extent the costs therefore are determined to be Pool Supported PTF in accordance with Schedule 12.

**Pool Transmission Facility (PTF)** means the transmission facilities owned by PTOs which meet the criteria specified in Section II.49 of the OATT.

**Posting Entity** is any Market Participant or Non-Market Participant Transmission Customer providing financial security under the provisions of the ISO New England Financial Assurance Policy.

**Posture** means an action of the ISO to deviate from the jointly optimized security constrained economic dispatch for Energy and Operating Reserves solution for a Resource produced by the ISO's technical software for the purpose of maintaining sufficient Operating Reserve (both online and off-line) or for the provision of voltage or VAR support.

**Posturing Credits** are the Real-Time Posturing NCPC Credits for Generators (Other Than Limited Energy Resources) Postured for Reliability and the Real-Time Posturing NCPC Credit for Limited Energy Resources Postured for Reliability.

**Power Purchaser** is the entity that is purchasing the capacity and/or energy to be transmitted under the OATT.

**Principal** is (i) the sole proprietor of a sole proprietorship; (ii) a general partner of a partnership; (iii) a president, chief executive officer, chief operating officer or chief financial officer (or equivalent position) of an organization; (iv) a manager, managing member or a member vested with the management authority for a limited liability company or limited liability partnership; (v) any person or entity that has the power to exercise a controlling influence over an organization's activities that are subject to regulation by the Federal Energy Regulatory Commission, the Securities and Exchange Commission, the Commodity Futures Trading Commission, any exchange monitored by the National Futures Association, or any state entity responsible for regulating activity in energy markets; or (vi) any person or entity that: (a) is the

direct owner of 10% or more of any class of an organization's equity securities; or (b) has directly contributed 10% or more of an organization's capital.

**Profiled Load Assets** include all Load Assets that are not directly metered by OP-18 compliant metering as currently described in Section IV (Metering and Recording for Settlements) of OP18, and some Load Assets that are measured by OP-18 compliant metering (as currently described in Section IV of OP-18) to which the Host Participant Assigned Meter Reader allocates non-PTF losses.

**Project Sponsor** is an entity seeking to have a New Generating Capacity Resource, New Import Capacity Resource or New Demand Capacity Resource participate in the Forward Capacity Market, as described in Section III.13.

**Proxy De-List Bid** is a type of bid used in the Forward Capacity Market.

**Provisional Member** is defined in Section I.68A of the Restated NEPOOL Agreement.

**PTO Administrative Committee** is the committee referred to in Section 11.04 of the TOA.

**Public Policy Requirement** is a requirement reflected in a statute enacted by, or a regulation promulgated by, the federal government or a state or local (e.g., municipal or county) government.

**Public Policy Transmission Study** is a study conducted by the ISO pursuant to the process set out in Section 4A.3 of Attachment K of the OATT, and consists of two phases: (i) an initial phase to produce a rough estimate of the costs and benefits of concepts that could meet transmission needs driven by public policy requirements; and (ii) a follow-on phase designed to produce more detailed analysis and engineering work on transmission concepts identified in the first phase.

**Public Policy Local Transmission Study** is a study conducted by a PTO pursuant to the process set out in Section 1.6 of Attachment K Appendix 1 of the OATT, and consists of two phases: (i) an initial phase to produce an estimate of the costs and benefits of concepts that could meet transmission needs driven by public policy requirements; and (ii) a follow-on phase designed to produce more detailed analysis and engineering work on transmission concepts identified in the first phase.

**Public Policy Transmission Upgrade** is an addition and/or upgrade to the New England Transmission System that meets the voltage and non-voltage criteria for Public Policy Transmission Upgrade PTF classification specified in the OATT, and has been included in the Regional System Plan and RSP Project List as a Public Policy Transmission Upgrade pursuant to the procedures described in Section 4A of Attachment K of the OATT.

**Publicly Owned Entity** is defined in Section I of the Restated NEPOOL Agreement.

**Qualification Process Cost Reimbursement Deposit** is described in Section III.13.1.9.3 of Market Rule 1.

**Qualified Capacity** is the amount of capacity a resource may provide in the summer or winter in a Capacity Commitment Period, as determined in the Forward Capacity Market qualification processes.

**Qualified Generator Reactive Resource(s)** is any generator source of dynamic reactive power that meets the criteria specified in Schedule 2 of the OATT.

**Qualified Non-Generator Reactive Resource(s)** is any non-generator source of dynamic reactive power that meets the criteria specified in Schedule 2 of the OATT.

**Qualified Reactive Resource(s)** is any Qualified Generator Reactive Resource and/or Qualified Non-Generator Reactive Resource that meets the criteria specified in Schedule 2 of the OATT.

**Qualified Transmission Project Sponsor** is defined in Sections 4B.2 and 4B.3 of Attachment K of the OATT.

**Queue Position** has the meaning specified in Section I of Schedule 22, Attachment 1 to Schedule 23, and Section I of Schedule 25 of the OATT.

**Rapid Response Pricing Asset** is: (i) a Fast Start Generator; (ii) a Flexible DNE Dispatchable Generator; or (iii) a Binary Storage DARD with Offer Data specifying a Minimum Run Time and a Minimum Down Time not exceeding one hour each. A Rapid Response Pricing Asset shall also include a Fast Start Demand Response Resource for which the Market Participant's Offer Data meets the following criteria:

(i) Minimum Reduction Time does not exceed one hour; and (ii) Demand Response Resource Notification Time plus Demand Response Resource Start-Up Time does not exceed 30 minutes.

**Rapid Response Pricing Opportunity Cost** is the NCPC Credit described in Section III.F.2.3.10.

**Rated** means a Market Participant that receives a credit rating from one or more of the Rating Agencies, or, if such Market Participant is not rated by one of the Rating Agencies, then a Market Participant that has outstanding unsecured debt rated by one or more of the Rating Agencies.

**Rating Agencies** are Standard and Poor's (S&P), Moody's, and Fitch.

**Rationing Minimum Limit** is the MW quantity for a New Generating Capacity Resource or Existing Generating Capacity Resource below which an offer or bid may not be rationed in the Forward Capacity Auction, but shall not apply to supply offers or demand bids in a substitution auction as specified in Section III.13.2.8.2 and Section III.13.2.8.3.

**RBA Decision** is a written decision provided by the ISO to a Disputing Party and to the Chair of the NEPOOL Budget and Finance Subcommittee accepting or denying a Requested Billing Adjustment within twenty Business Days of the date the ISO distributes a Notice of RBA, unless some later date is agreed upon by the Disputing Party and the ISO.

**Reactive Capability Audit** is an audit that measures the ability of a Reactive Resource to provide or absorb reactive power to or from the transmission system at a specified real power output or consumption.

**Reactive Resource** is a device that dynamically adjusts reactive power output automatically in Real-Time over a continuous range, taking into account control system response bandwidth, within a specified voltage bandwidth in response to grid voltage changes. These resources operate to maintain a set-point voltage and include, but are not limited to, Generator Assets, Dispatchable Asset Related Demands that are part of an Electric Storage Facility, and dynamic transmission devices.

**Reactive Supply and Voltage Control Service** is the form of Ancillary Service described in Schedule 2 of the OATT.

**Real-Time** is a period in the current Operating Day for which the ISO dispatches Resources for energy and Regulation, designates Resources for Regulation and Operating Reserve and, if necessary, commits additional Resources.

**Real-Time Adjusted Load Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Adjusted Load Obligation Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time Commitment NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Congestion Revenue** is defined in Section III.3.2.1(i) of Market Rule 1.

**Real-Time Demand Reduction Obligation** is defined in Section III.3.2.1(c) of Market Rule 1.

**Real-Time Demand Reduction Obligation Deviation** is defined in Section III.3.2.1(e) of Market Rule 1.

**Real-Time Dispatch NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Energy Inventory** is a component of the spot payment that a Market Participant may receive through the inventoried energy program, as described in Section III.K.3.2.1 of Market Rule 1.

**Real-Time Energy Market** means the purchase or sale of energy, purchase of demand reductions, payment of Congestion Costs, and payment for losses for quantity deviations from the Day-Ahead Energy Market in the Operating Day and designation of and payment for provision of Operating Reserve in Real-Time.

**Real-Time Energy Market Deviation Congestion Charge/Credit** is defined in Section III.3.2.1(g) of Market Rule 1.

**Real-Time Energy Market Deviation Energy Charge/Credit** is defined in Section III.3.2.1(g) of Market Rule 1.

**Real-Time Energy Market Deviation Loss Charge/Credit** is defined in Section III.3.2.1(g) of Market Rule 1.

**Real-Time Energy Market NCPC Credits** are the Real-Time Commitment NCPC Credit and the Real-Time Dispatch NCPC Credit.

**Real-Time External Transaction NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Generation Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Generation Obligation Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time High Operating Limit** is the maximum output, in MW, of a Generator Asset that could be achieved, consistent with Good Utility Practice, in response to an ISO request for Energy (including pursuant to Section III.13.6.4 of Market Rule 1), for each hour of the Operating Day, as reflected in the Generator Asset's Offer Data. This value is based on real-time operating conditions and the physical operating characteristics and operating permits of the facility and must be submitted for all Generator Assets (other than Settlement Only Resources).

**Real-Time Load Obligation** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Load Obligation Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time Locational Adjusted Net Interchange** is defined in Section III.3.2.1(b) of Market Rule 1.

**Real-Time Locational Adjusted Net Interchange Deviation** is defined in Section III.3.2.1(d) of Market Rule 1.

**Real-Time Loss Revenue** is defined in Section III.3.2.1(l) of Market Rule 1.

**Real-Time Loss Revenue Charges or Credits** are defined in Section III.3.2.1(m) of Market Rule 1.

**Real-Time NCP Load Obligation** is the maximum hourly value, during a month, of a Market Participant's Real-Time Load Obligation summed over all Locations, excluding exports, in kilowatts.

**Real-Time Offer Change** is a modification to a Supply Offer pursuant to Section III.1.10.9(b).

**Real-Time Posturing NCPC Credit for Generators (Other Than Limited Energy Resources) Postured for Reliability** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Posturing NCPC Credit for Limited Energy Resources Postured for Reliability** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.

**Real-Time Prices** means the Locational Marginal Prices resulting from the ISO's dispatch of the New England Markets in the Operating Day.

**Real-Time Reserve Charge** is a Market Participant's share of applicable system and Reserve Zone Real-Time Operating Reserve costs attributable to meeting the Real-Time Operating Reserve requirement as calculated in accordance with Section III.10 of Market Rule 1.

**Real-Time Reserve Clearing Price** is the Real-Time TMSR, TMNSR or TMOR clearing price, as applicable, for the system and each Reserve Zone that is calculated in accordance with Section III.2.7A of Market Rule 1.

**Real-Time Reserve Credit** is a Market Participant's compensation associated with that Market Participant's Resources' Reserve Quantity For Settlement as calculated in accordance with Section III.10 of Market Rule 1.

**Real-Time Reserve Designation** is the amount, in MW, of Operating Reserve designated to a Resource in Real-Time by the ISO as described in Section III.1.7.19 of Market Rule 1.

**Real-Time Reserve Opportunity Cost** is defined in Section III.2.7A(b) of Market Rule 1.

**Real-Time Synchronous Condensing NCPC Credit** is an NCPC Credit calculated pursuant to Appendix F to Market Rule 1.



**Real-Time System Adjusted Net Interchange** means, for each hour, the sum of Real-Time Locational Adjusted Net Interchange for a Market Participant over all Locations, in kilowatts.

**Receiving Party** is the entity receiving the capacity and/or energy transmitted to Point(s) of Delivery under the OATT.

**Reference Level** is defined in Section III.A.5.7 of Appendix A of Market Rule 1.

**Regional Benefit Upgrade(s) (RBU)** means a Transmission Upgrade that: (i) is rated 115kV or above; (ii) meets all of the non-voltage criteria for PTF classification specified in the OATT; and (iii) is included in the Regional System Plan as either a Reliability Transmission Upgrade or a Market Efficiency Transmission Upgrade identified as needed pursuant to Attachment K of the OATT. The category of RBU shall not include any Transmission Upgrade that has been categorized under any of the other categories specified in Schedule 12 of the OATT (e.g., an Elective Transmission Upgrade shall not also be categorized as an RBU). Any upgrades to transmission facilities rated below 115kV that were PTF prior to January 1, 2004 shall remain classified as PTF and be categorized as an RBU if, and for so long as, such upgrades meet the criteria for PTF specified in the OATT.

**Regional Network Load** is the load that a Network Customer designates for Regional Network Service under Part II.B of the OATT. The Network Customer's Regional Network Load shall include all load designated by the Network Customer (including losses). A Network Customer may elect to designate less than its total load as Regional Network Load but may not designate only part of the load at a discrete Point of Delivery. Where a Transmission Customer has elected not to designate a particular load at discrete Points of Delivery as Regional Network Load, the Transmission Customer is responsible for making separate arrangements under Part II.C of the OATT for any Point-To-Point Service that may be necessary for such non-designated load. A Network Customer's Monthly Regional Network Load shall be calculated in accordance with Section II.21.2 of the OATT.

**Regional Network Service (RNS)** is the transmission service over the PTF described in Part II.B of the OATT, including such service which is used with respect to Network Resources or Regional Network Load that is not physically interconnected with the PTF.

**Regional Planning Dispute Resolution Process** is described in Section 12 of Attachment K to the OATT.

**Regional System Plan (RSP)** is the plan developed under the process specified in Attachment K of the OATT.

**Regional Transmission Service (RTS)** is Regional Network Service and Through or Out Service as provided over the PTF in accordance with Section II.B, Section II.C, Schedule 8 and Schedule 9 of the OATT.

**Regulation** is the capability of a specific Resource with appropriate telecommunications, control and response capability to respond to an AGC SetPoint.

**Regulation and Frequency Response Service** is the form of Ancillary Service described in Schedule 3 of the OATT. The capability of performing Regulation and Frequency Response Service is referred to as automatic generation control (AGC).

**Regulation Capacity** is the lesser of five times the Automatic Response Rate and one-half of the difference between the Regulation High Limit and the Regulation Low Limit of a Resource capable of providing Regulation.

**Regulation Capacity Requirement** is the amount of Regulation Capacity required to maintain system control and reliability in the New England Control Area as calculated and posted on the ISO website.

**Regulation Capacity Offer** is an offer by a Market Participant to provide Regulation Capacity.

**Regulation High Limit** is an offer parameter that establishes the upper bound for AGC SetPoints and is used in the determination of a Resource's Regulation Capacity.

**Regulation Low Limit** is an offer parameter that establishes the lower bound for AGC SetPoints and is used in the determination of a Resource's Regulation Capacity.

**Regulation Market** is the market described in Section III.14 of Market Rule 1.

**Regulation Resources** are those Alternative Technology Regulation Resources, Generator Assets, and Dispatchable Asset Related Demands that satisfy the requirements of Section III.14.2. Regulation Resources are eligible to participate in the Regulation Market.

**Regulation Service** is the change in output or consumption made in response to changing AGC SetPoints.

**Regulation Service Requirement** is the estimated amount of Regulation Service required to maintain system control and reliability in the New England Control Area as calculated and posted on the ISO website.

**Regulation Service Offer** is an offer by a Market Participant to provide Regulation Service.

**Related Person** is defined pursuant to Section 1.1 of the Participants Agreement.

**Related Transaction** is defined in Section III.1.4.3 of Market Rule 1.

**Reliability Administration Service (RAS)** is the service provided by the ISO, as described in Schedule 3 of Section IV.A of the Tariff, in order to administer the Reliability Markets and provide other reliability-related and informational functions.

**Reliability Committee** is the committee whose responsibilities are specified in Section 8.2.3 of the Participants Agreement.

**Reliability Markets** are, collectively, the ISO's administration of Regulation, the Forward Capacity Market, and Operating Reserve.

**Reliability Region** means any one of the regions identified on the ISO's website. Reliability Regions are intended to reflect the operating characteristics of, and the major transmission constraints on, the New England Transmission System.

**Reliability Transmission Upgrade** means those additions and upgrades not required by the interconnection of a generator that are nonetheless necessary to ensure the continued reliability of the New England Transmission System, taking into account load growth and known resource changes, and

include those upgrades necessary to provide acceptable stability response, short circuit capability and system voltage levels, and those facilities required to provide adequate thermal capability and local voltage levels that cannot otherwise be achieved with reasonable assumptions for certain amounts of generation being unavailable (due to maintenance or forced outages) for purposes of long-term planning studies. Good Utility Practice, applicable reliability principles, guidelines, criteria, rules, procedures and standards of ERO and NPCC and any of their successors, applicable publicly available local reliability criteria, and the ISO System Rules, as they may be amended from time to time, will be used to define the system facilities required to maintain reliability in evaluating proposed Reliability Transmission Upgrades. A Reliability Transmission Upgrade may provide market efficiency benefits as well as reliability benefits to the New England Transmission System.

**Remittance Advice** is an issuance from the ISO for the net Payment owed to a Covered Entity where a Covered Entity's total Payments exceed its total Charges in a billing period.

**Remittance Advice Date** is the day on which the ISO issues a Remittance Advice.

**Renewable Technology Resource** is a Generating Capacity Resource or an On-Peak Demand Resource that satisfies the requirements specified in Section III.13.1.1.1.7.

**Re-Offer Period** is the period that normally occurs between the posting of the of the Day-Ahead Energy Market results and 2:00 p.m. on the day before the Operating Day during which a Market Participant may submit revised Supply Offers, revised External Transactions, or revised Demand Bids associated with Dispatchable Asset Related Demands or, revised Demand Reduction Offers associated with Demand Response Resources.

**Replacement Reserve** is described in Part III, Section VII of ISO New England Operating Procedure No. 8.

**Request for Alternative Proposals (RFAP)** is the request described in Attachment K of the OATT.

**Requested Billing Adjustment (RBA)** is defined in Section 6.1 of the ISO New England Billing Policy.

**Required Balance** is an amount as defined in Section 5.3 of the Billing Policy.

**Reseller** is a MGTSA holder that sells, assigns or transfers its rights under its MGTSA, as described in Section II.45.1(a) of the OATT.

**Reserve Adequacy Analysis** is the analysis performed by the ISO to determine if adequate Resources are committed to meet forecasted load, Operating Reserve, and security constraint requirements for the current and next Operating Day.

**Reserve Constraint Penalty Factors (RCPFs)** are rates, in \$/MWh, that are used within the Real-Time dispatch and pricing algorithm to reflect the value of Operating Reserve shortages and are defined in Section III.2.7A(c) of Market Rule 1.

**Reserve Quantity For Settlement** is defined in Section III.10.1 of Market Rule 1.

**Reserve Zone** is defined in Section III.2.7 of Market Rule 1.

**Reserved Capacity** is the maximum amount of capacity and energy that is committed to the Transmission Customer for transmission over the New England Transmission System between the Point(s) of Receipt and the Point(s) of Delivery under Part II.C or Schedule 18, 20 or 21 of the OATT, as applicable. Reserved Capacity shall be expressed in terms of whole kilowatts on a sixty-minute interval (commencing on the clock hour) basis, or, in the case of Reserved Capacity for Local Point-to-Point Service, in terms of whole megawatts on a sixty-minute interval basis.

**Resource** means a Generator Asset, a Dispatchable Asset Related Demand, an External Resource, an External Transaction, or a Demand Response Resource.

**Restated New England Power Pool Agreement (RNA)** is the Second Restated New England Power Pool Agreement, which restated for a second time by an amendment dated as of August 16, 2004 the New England Power Pool Agreement dated September 1, 1971, as the same may be amended and restated from time to time, governing the relationship among the NEPOOL members.

**Rest-of-Pool Capacity Zone** is a single Capacity Zone made up of the adjacent Load Zones that are neither export-constrained nor import-constrained.

**Rest of System** is an area established under Section III.2.7(d) of Market Rule 1.

**Retail Delivery Point** is the point on the transmission or distribution system at which the load of an end-use facility, which is metered and assigned a unique account number by the Host Participant, is measured to determine the amount of energy delivered to the facility from the transmission and distribution system. If an end-use facility is connected to the transmission or distribution system at more than one location, the Retail Delivery Point shall consist of the metered load at each connection point, summed to measure the net energy delivered to the facility in each interval.

**Retirement De-List Bid** is a bid to retire an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Capacity Resource from all New England Markets, as described in Section III.13.1.2.3.1.5.

**Returning Market Participant** is a Market Participant, other than an FTR-Only Customer or a Governance Only Member, whose previous membership as a Market Participant was involuntarily terminated due to a Financial Assurance Default or a payment default and, since returning, has been a Market Participant for less than six consecutive months.

**Revenue Requirement** is defined in Section IV.A.2.1 of the Tariff.

**Reviewable Action** is defined in Section III.D.1.1 of Appendix D of Market Rule 1.

**Reviewable Determination** is defined in Section 12.4(a) of Attachment K to the OATT.

**RSP Project List** is defined in Section 1 of Attachment K to the OATT.

**RTEP02 Upgrade(s)** means a Transmission Upgrade that was included in the annual NEPOOL Transmission Plan (also known as the “Regional Transmission Expansion Plan” or “RTEP”) for the year 2002, as approved by ISO New England Inc.’s Board of Directors, or the functional equivalent of such Transmission Upgrade, as determined by ISO New England Inc. The RTEP02 Upgrades are listed in Schedule 12B of the OATT.

**RTO** is a regional transmission organization or comparable independent transmission organization that complies with Order No. 2000 and the Commission’s corresponding regulation.

**Same Reserve Zone Export Transaction** is defined in Section III.1.10.7(f)(iii) of Market Rule 1.

**Schedule, Schedules, Schedule 1, 2, 3, 4 and 5** are references to the individual or collective schedules to Section IV.A. of the Tariff.

**Schedule 20A Service Provider (SSP)** is defined in Schedule 20A to Section II of this Tariff.

**Scheduling Service**, for purposes of Section IV.A and Section IV.B of the Tariff, is the service described in Schedule 1 to Section IV.A of the Tariff.

**Scheduling, System Control and Dispatch Service**, for purposes of Section II of the Tariff, is the form of Ancillary Service described in Schedule 1 of the OATT.

**Seasonal Claimed Capability** is the summer or winter claimed capability of a Generator Asset or Generating Capacity Resource, and represents the maximum dependable load carrying ability of the asset or resource, excluding capacity required for station use.

**Seasonal Claimed Capability Audit** is the Generator Asset audit performed pursuant to Section III.1.5.1.3.

**Seasonal DR Audit** is the Demand Response Resource audit performed pursuant to Section III.1.5.1.3.1.

**Seasonal Peak Demand Resource** is a type of Demand Capacity Resource and shall mean installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that reduce the total amount of electrical energy consumed during Demand Resource Seasonal Peak Hours, while delivering a comparable or acceptable level of end-use service. Such measures include Energy Efficiency, Load Management, and Distributed Generation.

**Section III.1.4 Transactions** are defined in Section III.1.4.2 of Market Rule 1.

**Section III.1.4 Conforming Transactions** are defined in Section III.1.4.2 of Market Rule 1.

**Security Agreement** is Attachment 1 to the ISO New England Financial Assurance Policy.

**Selected Qualified Transmission Project Sponsor** is the Qualified Transmission Project Sponsor that proposed the Phase Two or Stage Two Solution that has been identified by the ISO as the preferred Phase Two or Stage Two Solution.

**Selected Qualified Transmission Project Sponsor Agreement** is the agreement between the ISO and a Selected Qualified Transmission Project Sponsor. The Selected Qualified Transmission Project Sponsor Agreement is provided in Attachment P to the OATT.

**Self-Schedule** is the action of a Market Participant in committing its Generator Asset or DARD, in accordance with applicable ISO New England Manuals, to provide service in an hour, whether or not in the absence of that action the Generator Asset or DARD would have been committed by the ISO to provide the service. For a Generator Asset, Self-Schedule is the action of a Market Participant in committing a Generator Asset to provide Energy in an hour at its Economic Minimum Limit, whether or not in the absence of that action the Generator Asset would have been committed by the ISO to provide the Energy. For a DARD, Self-Schedule is the action of a Market Participant in committing a DARD to consume Energy in an hour at its Minimum Consumption Limit, whether or not in the absence of that action the DARD would have been committed by the ISO to consume Energy. For an External Transaction, a Self-Schedule is a request by a Market Participant for the ISO to select the External Transaction regardless of the LMP. Demand Response Resources are not permitted to Self-Schedule.

**Self-Supplied FCA Resource** is described in Section III.13.1.6 of Market Rule 1.

**Senior Officer** means an officer of the subject entity with the title of vice president (or similar office) or higher, or another officer designated in writing to the ISO by that officer.

**Service Agreement** is a Transmission Service Agreement or an MPSA.

**Service Commencement Date** is the date service is to begin pursuant to the terms of an executed Service Agreement, or the date service begins in accordance with the sections of the OATT addressing the filing of unexecuted Service Agreements.

**Services** means, collectively, the Scheduling Service, EAS and RAS; individually, a Service.



**Settlement Financial Assurance** is an amount of financial assurance required from a Designated FTR Participant awarded a bid in an FTR Auction. This amount is calculated pursuant to Section VI.C of the ISO New England Financial Assurance Policy.

**Settlement Only Resources** are generators of less than 5 MW of maximum net output when operating at any temperature at or above zero degrees Fahrenheit, that meet the metering, interconnection and other requirements in ISO New England Operating Procedure No. 14 and that have elected Settlement Only Resource treatment as described in the ISO New England Manual for Registration and Performance Auditing.

**Shortfall Funding Arrangement**, as specified in Section 5.1 of the ISO New England Billing Policy, is a separate financing arrangement that can be used to make up any non-congestion related differences between amounts received on Invoices and amounts due for ISO Charges in any bill issued.

**Short-Term** is a period of less than one year.

**Significantly Reduced Congestion Costs** are defined in Section III.G.2.2 of Appendix G to Market Rule 1.

**SMD Effective Date** is March 1, 2003.

**Solar High Limit** is the estimated power output (MW) of a solar Generator Asset given the Real-Time solar and weather conditions, taking into account equipment outages, and absent any self-imposed reductions in power output or any reduction in power output as a result of a Dispatch Instruction, calculated in the manner described in the ISO Operating Documents.

**Solar Plant Future Availability** is the forecasted Real-Time High Operating Limit of a solar Generator Asset, calculated in the manner described in the ISO Operating Documents.

**Solutions Study** is described in Section 4.2(b) of Attachment K to the OATT.

**Special Constraint Resource (SCR)** is a Resource that provides Special Constraint Resource Service under Schedule 19 of the OATT.

**Special Constraint Resource Service** is the form of Ancillary Service described in Schedule 19 of the OATT.

**Specified-Term Blackstart Capital Payment** is the annual compensation level, as calculated pursuant to Section 5.1 of Schedule 16 of the OATT, for a Designated Blackstart Resource's capital Blackstart Equipment costs associated with the provision of Blackstart Service (except for capital costs associated with adhering to NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Sponsored Policy Resource** is a New Capacity Resource that: receives a revenue source, other than revenues from ISO-administered markets, that is supported by a government-regulated rate, charge, or other regulated cost recovery mechanism, and; qualifies as a renewable, clean, zero carbon, or alternative energy resource under a renewable energy portfolio standard, clean energy standard, decarbonization or net-zero carbon standard, alternative energy portfolio standard, renewable energy goal, clean energy goal, or decarbonization or net-zero carbon goal enacted by federal or New England state statute, regulation, or executive or administrative order and as a result of which the resource receives the revenue source.

**Stage One Proposal** is a first round submission, as defined in Sections 4A.5 of Attachment K of the OATT, of a proposal for a Public Policy Transmission Upgrade by a Qualified Transmission Project Sponsor.

**Stage Two Solution** is a second round submission, as defined in Section 4A.5 of Attachment K of the OATT, of a proposal for a Public Policy Transmission Upgrade by a Qualified Transmission Project Sponsor.

**Stakeholder-Requested Scenario** is an Economic Study reference scenario that is described in Section 17.2(d) of Attachment K to the OATT.

**Standard Blackstart Capital Payment** is the annual compensation level, as calculated pursuant to Section 5.1 of Schedule 16 of the OATT, for a Designated Blackstart Resource's capital Blackstart Equipment costs associated with the provision of Blackstart Service (except for capital costs associated with adhering to NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**Start-of-Round Price** is the highest price associated with a round of a Forward Capacity Auction as described in Section III.13.2.3.1 of Market Rule 1.

**Start-Up Fee** is the amount, in dollars, that must be paid for a Generator Asset to Market Participants with an Ownership Share in the Generator Asset each time the Generator Asset is scheduled in the New England Markets to start-up.

**Start-Up Time** is the time it takes the Generator Asset, after synchronizing to the system, to reach its Economic Minimum Limit and, for dispatchable Generator Assets, be ready for further dispatch by the ISO.

**State Estimator** means the computer model of power flows specified in Section III.2.3 of Market Rule 1.

**State-identified Requirement** refers to a legal requirement, mandate or policy of a New England state or local government that forms the basis for a Longer-Term Transmission Study request submitted to the ISO pursuant to the process set out in Section 16 of Attachment K of the OATT.

**Statements**, for the purpose of the ISO New England Billing Policy, refer to both Invoices and Remittance Advices.

**Static De-List Bid** is a bid that may be submitted by an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Capacity Resource in the Forward Capacity Auction to remove itself from the capacity market for a one year period, as described in Section III.13.1.2.3.1.1 of Market Rule 1.

**Station** is one or more Existing Generating Capacity Resources consisting of one or more assets located within a common property boundary.

**Station Going Forward Common Costs** are the net costs associated with a Station that are avoided only by the clearing of the Static De-List Bids, the Permanent De-List Bids or the Retirement De-List Bids of all the Existing Generating Capacity Resources comprising the Station.

**Station-level Blackstart O&M Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Station-level Specified-Term Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Station-level Standard Blackstart Capital Payment** is defined and calculated as specified in Section 5.1.2 of Schedule 16 to the OATT.

**Storage DARD** is a DARD that participates in the New England Markets as part of an Electric Storage Facility, as described in Section III.1.10.6 of Market Rule 1.

**Summer ARA Qualified Capacity** is described in Section III.13.4.2.1.2.1.1.1 of Market Rule 1.

**Summer Capability Period** means one of two time periods defined by the ISO for the purposes of rating and auditing resources pursuant to Section III.9. The time period associated with the Summer Capability Period is the period of June 1 through September 30.

**Summer Intermittent Reliability Hours** are defined in Section III.13.1.2.2.2.1(c) of Market Rule 1.

**Supply Offer** is a proposal to furnish energy at a Node or Regulation from a Resource that meets the applicable requirements set forth in the ISO New England Manuals submitted to the ISO by a Market Participant with authority to submit a Supply Offer for the Resource. The Supply Offer will be submitted pursuant to Market Rule 1 and applicable ISO New England Manuals, and include a price and information with respect to the quantity proposed to be furnished, technical parameters for the Resource, timing and other matters. A Supply Offer is a subset of the information required in a Market Participant's Offer Data.

**Supply Offer Block-Hours** are Block-Hours assigned to the Lead Market Participant for each Supply Offer. Blocks of the Supply Offer in effect for each hour will be totaled to determine the quantity of Supply Offer Block-Hours for a given day. In the case that a Resource has a Real-Time unit status of "unavailable" for the entire day, that day will not contribute to the quantity of Supply Offer Block-Hours. However, if the Resource has at least one hour of the day with a unit status of "available," the entire day will contribute to the quantity of Supply Offer Block-Hours.

**Synchronous Condenser** is a generator that is synchronized to the grid but supplying no energy for the purpose of providing Operating Reserve or VAR or voltage support.

**System Condition** is a specified condition on the New England Transmission System or on a neighboring system, such as a constrained transmission element or flowgate, that may trigger Curtailment of Long-Term Firm MTF or OTF Service on the MTF or the OTF using the curtailment priority pursuant to Section II.44 of the Tariff or Curtailment of Local Long-Term Firm Point-to-Point Transmission Service on the non-PTF using the curtailment priority pursuant to Schedule 21 of the Tariff. Such conditions must be identified in the Transmission Customer's Service Agreement.

**System Impact Study** is an assessment pursuant to Part II.B, II.C, II.G, Schedule 21, Schedule 22, Schedule 23, or Schedule 25 of the OATT of (i) the adequacy of the PTF or Non-PTF to accommodate a request for the interconnection of a new or materially changed generating unit or a new or materially changed interconnection to another Control Area or new Regional Network Service or new Local Service or an Elective Transmission Upgrade, and (ii) whether any additional costs may be required to be incurred in order to provide the interconnection or transmission service.

**System Operator** shall mean ISO New England Inc. or a successor organization.

**System Operating Limit (SOL)** has the meaning specified in the Glossary of Terms Used in NERC Reliability Standards.

**System-Wide Capacity Demand Curve** is the demand curve used in the Forward Capacity Market as specified in Section III.13.2.2.

**TADO** is the total amount due and owing (not including any amounts due under Section 14.1 of the RNA) at such time to the ISO, NEPOOL, the PTOs, the Market Participants and the Non-Market Participant Transmission Customers, by all PTOs, Market Participants and Non-Market Participant Transmission Customers.

**Tangible Net Worth** is the value, determined in accordance with international accounting standards or generally accepted accounting principles in the United States, of all of that entity's assets less the following: (i) assets the ISO reasonably believes to be restricted or potentially unavailable to settle a

claim in the event of a default (e.g., regulatory assets, restricted assets, and Affiliate assets), net of any matching liabilities, to the extent that the result of that netting is a positive value; (ii) derivative assets, net of any matching liabilities, to the extent that the result of that netting is a positive value; (iii) the amount at which the liabilities of the entity would be shown on a balance sheet in accordance with international accounting standards or generally accepted accounting principles in the United States; (iv) preferred stock; (v) non-controlling interest; and (vi) all of that entity's intangible assets (e.g., patents, trademarks, franchises, intellectual property, goodwill and any other assets not having a physical existence), in each case as shown on the most recent financial statements provided by such entity to the ISO.

**Technical Committee** is defined in Section 8.2 of the Participants Agreement.

**Ten-Minute Non-Spinning Reserve (TMNSR)** is a form of ten-minute reserve capability, determined pursuant to Section III.1.7.19.2.

**Ten-Minute Non-Spinning Reserve Service** is the form of Ancillary Service described in Schedule 6 of the OATT.

**Ten-Minute Reserve Requirement** is the combined amount of TMSR and TMNSR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Ten-Minute Spinning Reserve (TMSR)** is a form of ten-minute reserve capability, determined pursuant to Section III.1.7.19.2.

**Ten-Minute Spinning Reserve Requirement** is the amount of TMSR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Ten-Minute Spinning Reserve Service** is the form of Ancillary Service described in Schedule 5 of the OATT.

**Third-Party Sale** is any sale for resale in interstate commerce to a Power Purchaser that is not designated as part of Regional Network Load or Local Network Load under the Regional Network Service or Local Network Service, as applicable.

**Thirty-Minute Operating Reserve (TMOR)** is a form of thirty-minute reserve capability, determined pursuant to Section III.1.7.19.2.

**Thirty-Minute Operating Reserve Service** is the form of Ancillary Service described in Schedule 7 of the OATT.

**Through or Out Rate (TOUT Rate)** is the rate per hour for Through or Out Service, as defined in Section II.25.2 of the OATT.

**Through or Out Service (TOUT Service)** means Point-To-Point Service over the PTF provided by the ISO with respect to a transaction that goes through the New England Control Area, as, for example, a single transaction where energy or capacity is transmitted into the New England Control Area from New Brunswick and subsequently out of the New England Control Area to New York, or a single transaction where energy or capacity is transmitted into the New England Control Area from New York through one point on the PTF and subsequently flows over the PTF prior to passing out of the New England Control Area to New York, or with respect to a transaction which originates at a point on the PTF and flows over the PTF prior to passing out of the New England Control Area, as, for example, from Boston to New York.

**Tie-Line Asset** is a physical transmission tie-line, or an inter-state or intra-state border arrangement created according to the ISO New England Manuals and registered in accordance with the Asset Registration Process.

**Total Available Amount** is the sum of the available amount of the Shortfall Funding Arrangement and the balance in the Payment Default Shortfall Fund.

**Total Blackstart Capital Payment** is the annual compensation calculated under either Section 5.1 or Section 5.2 of Schedule 16 of the OATT, as applicable.

**Total Blackstart Service Payments** is monthly compensation to Blackstart Owners or Market Participants, as applicable, and as calculated pursuant to Section 5.6 of Schedule 16 to the OATT.

**Total Reserve Requirement**, which includes Replacement Reserve, is the combined amount of TMSR, TMNSR, and TMOR required system-wide as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**Total System Capacity** is the aggregate capacity supply curve for the New England Control Area as determined in accordance with Section III.13.2.3.3 of Market Rule 1.

**Transaction Unit (TU)** is a type of billing determinant under Schedule 2 of Section IV.A of the Tariff used to assess charges to Customers.

**Transition Period:** The six-year period commencing on March 1, 1997.

**Transmission Charges**, for the purposes of the ISO New England Financial Assurance Policy and the ISO New England Billing Policy, are all charges and payments under Schedules 1, 8 and 9 of the OATT.

**Transmission Congestion Credit** means the allocated share of total Transmission Congestion Revenue credited to each holder of Financial Transmission Rights, calculated and allocated as specified in Section III.5.2 of Market Rule 1.

**Transmission Congestion Revenue** is defined in Section III.5.2.5(a) of Market Rule 1.

**Transmission Constraint Penalty Factors** are described in Section III.1.7.5 of Market Rule 1.

**Transmission Credit Limit** is a credit limit, not to be used to meet FTR Requirements, established for each Market Participant in accordance with Section II.D and each Non-Market Participant Transmission Customer in accordance with Section V.B.2 of the ISO New England Financial Assurance Policy.

**Transmission Credit Test Percentage** is calculated in accordance with Section III.B.1(c) of the ISO New England Financial Assurance Policy.

**Transmission Customer** is any Eligible Customer that (i) executes, on its own behalf or through its Designated Agent, an MPSA or TSA, or (ii) requests in writing, on its own behalf or through its Designated Agent, that the ISO, the Transmission Owner, or the Schedule 20A Service Provider, as applicable, file with the Commission, a proposed unexecuted MPSA or TSA containing terms and



conditions deemed appropriate by the ISO (in consultation with the applicable PTO, OTO or Schedule 20A Service Provider) in order that the Eligible Customer may receive transmission service under Section II of this Tariff. A Transmission Customer under Section II of this Tariff includes a Market Participant or a Non-Market Participant taking Regional Network Service, Through or Out Service, MTF Service, OTF Service, Ancillary Services, or Local Service.

**Transmission Default Amount** is all or any part of any amount of Transmission Charges due to be paid by any Covered Entity that the ISO, in its reasonable opinion, believes will not or has not been paid when due.

**Transmission Default Period** is defined in Section 3.4.f of the ISO New England Billing Policy.

**Transmission Late Payment Account** is defined in Section 4.2 of the ISO New England Billing Policy.

**Transmission Late Payment Account Limit** is defined in Section 4.2 of the ISO New England Billing Policy.

**Transmission Late Payment Charge** is defined in Section 4.1 of the ISO New England Billing Policy.

**Transmission, Markets and Services Tariff (Tariff)** is the ISO New England Inc. Transmission, Markets and Services Tariff, as amended from time to time.

**Transmission Obligations** are determined in accordance with Section III.A(vi) of the ISO New England Financial Assurance Policy.

**Transmission Operating Agreement (TOA)** is the Transmission Operating Agreement between and among the ISO and the PTOs, as amended and restated from time to time.

**Transmission Owner** means a PTO, MTO or OTO.

**Transmission Provider** is the ISO for Regional Network Service and Through or Out Service as provided under Section II.B and II.C of the OATT; Cross-Sound Cable, LLC for Merchant Transmission Service as provided under Schedule 18 of the OATT; the Schedule 20A Service Providers for Phase I/II

HVDC-TF Service as provided under Schedule 20A of the OATT; and the Participating Transmission Owners for Local Service as provided under Schedule 21 of the OATT.

**Transmission Requirements** are determined in accordance with Section III.A(iii) of the ISO New England Financial Assurance Policy.

**Transmission Security Analysis Requirement** shall be determined pursuant to Section III.12.2.1.2.

**Transmission Service Agreement (TSA)** is the initial agreement and any amendments or supplements thereto: (A) in the form specified in either Attachment A or B to the OATT, entered into by the Transmission Customer and the ISO for Regional Network Service or Through or Out Service; (B) entered into by the Transmission Customer with the ISO and PTO in the form specified in Attachment A to Schedule 21 of the OATT; (C) entered into by the Transmission Customer with an OTO or Schedule 20A Service Provider in the appropriate form specified under Schedule 20 of the OATT; or (D) entered into by the Transmission Customer with a MTO in the appropriate form specified under Schedule 18 of the OATT. A Transmission Service Agreement shall be required for Local Service, MTF Service and OTF Service, and shall be required for Regional Network Service and Through or Out Service if the Transmission Customer has not executed a MPSA.

**Transmission Upgrade(s)** means an upgrade, modification or addition to the PTF that becomes subject to the terms and conditions of the OATT governing rates and service on the PTF on or after January 1, 2004. This categorization and cost allocation of Transmission Upgrades shall be as provided for in Schedule 12 of the OATT.

**UDS** is unit dispatch system software.

**Unconstrained Export Transaction** is defined in Section III.1.10.7(f)(iv) of Market Rule 1.

**Uncovered Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Uncovered Transmission Default Amounts** are defined in Section 3.4.f of the ISO New England Billing Policy.

**Unrated** means a Market Participant that is not a Rated Market Participant.

**Unsecured Covered Entity** is, collectively, an Unsecured Municipal Market Participant and an Unsecured Non-Municipal Covered Entity.

**Unsecured Municipal Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Unsecured Municipal Market Participant** is defined in Section 3.3(h) of the ISO New England Billing Policy.

**Unsecured Municipal Transmission Default Amount** is defined in Section 3.4.f of the ISO New England Billing Policy.

**Unsecured Non-Municipal Covered Entity** is a Covered Entity that is not a Municipal Market Participant or a Non-Market Participant Transmission Customer and has a Market Credit Limit or Transmission Credit Limit of greater than \$0 under the ISO New England Financial Assurance Policy.

**Unsecured Non-Municipal Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Unsecured Non-Municipal Transmission Default Amount** is defined in Section 3.3(i) of the ISO New England Billing Policy.

**Unsecured Transmission Default Amounts** are, collectively, the Unsecured Municipal Transmission Default Amount and the Unsecured Non-Municipal Transmission Default Amount.

**Unsettled FTR Financial Assurance** is an amount of financial assurance required from a Designated FTR Participant as calculated pursuant to Section VI.B of the ISO New England Financial Assurance Policy.

**Updated Measurement and Verification Plan** is an optional Measurement and Verification Plan that may be submitted as part of a subsequent qualification process for a Forward Capacity Auction prior to the beginning of the Capacity Commitment Period of the On-Peak Demand Resource or Seasonal Peak Demand Response project. The Updated Measurement and Verification Plan may include updated project

specifications, measurement and verification protocols, and performance data as described in Section III.13.1.4.3.1.2 of Market Rule 1 and the ISO New England Manuals.

**VAR CC Rate** is the CC rate paid to Qualified Reactive Resources for VAR Service capability under Section IV.A of Schedule 2 of the OATT.

**VAR Payment** is the payment made to Qualified Reactive Resources for VAR Service capability under Section IV.A of Schedule 2 of the OATT.

**VAR Service** is the provision of reactive power voltage support to the New England Transmission System by a Qualified Reactive Resource or by other generators that are dispatched by the ISO to provide dynamic reactive power as described in Schedule 2 of the OATT.

**Virtual Cap** is \$2,000/MWh.

**Virtual Requirements** are determined in accordance with Section III.A(iv) of the ISO New England Financial Assurance Policy.

**Volt Ampere Reactive (VAR)** is a measurement of reactive power.

**Volumetric Measure (VM)** is a type of billing determinant under Schedule 2 of Section IV.A of the Tariff used to assess charges to Customers under Section IV.A of the Tariff.

**Wind High Limit** is the estimated power output (MW) of a wind Generator Asset given the Real-Time weather conditions, taking into account equipment outages, and absent any self-imposed reductions in power output or any reduction in power output as a result of a Dispatch Instruction, calculated in the manner described in the ISO Operating Documents.

**Wind Plant Future Availability** is the forecasted Real-Time High Operating Limit of a wind Generator Asset, calculated in the manner described in the ISO Operating Documents.

**Winter ARA Qualified Capacity** is described in Section III.13.4.2.1.2.1.1.2 of Market Rule 1.

**Winter Capability Period** means one of two time periods defined by the ISO for the purposes of rating and auditing resources pursuant to Section III.9. The time period associated with the Winter Capability Period is the period October 1 through May 31.

**Winter Intermittent Reliability Hours** are defined in Section III.13.1.2.2.2.2(c) of Market Rule 1.

**Year** means a period of 365 or 366 days, whichever is appropriate, commencing on, or on the anniversary of March 1, 1997. Year One is the Year commencing on March 1, 1997, and Years Two and higher follow it in sequence.

**Zonal Price** is calculated in accordance with Section III.2.7 of Market Rule 1.

**Zonal Capacity Obligation** is calculated in accordance with Section III.13.7.5.2 of Market Rule 1.

**Zonal Reserve Requirement** is the combined amount of TMSR, TMNSR, and TMOR required for a Reserve Zone as described in Section III.2.7A and ISO New England Operating Procedure No. 8.

**ATTACHMENT K**  
**REGIONAL SYSTEM PLANNING PROCESS**

**TABLE OF CONTENTS**

1. Overview
  - 1.1 Enrollment
  - 1.2 A List of Entities Enrolled in the Planning Region
2. Planning Advisory Committee
  - 2.1 Establishment
  - 2.2 Role of Planning Advisory Committee
  - 2.3 Membership
  - 2.4 Procedures
    - (a) Notice of Meetings
    - (b) Frequency of Meetings
    - (c) Availability of Meeting Materials
    - (d) Access to Planning-Related Materials that Contain CEII
  - 2.5 Local System Planning Process
3. RSP: Principles, Scope, and Contents
  - 3.1 Description of RSP
  - 3.2 Baseline of RSP
  - 3.3 RSP Planning Horizon and Parameters
  - 3.4 Other RSP Principles
  - 3.5 Market Responses in RSP
  - 3.6 The RSP Project List
    - (a) Elements of the Project List
    - (b) Periodic Updating of RSP Project List
    - (c) Project List Updating Procedures and Criteria
    - (d) Posting of LSP Project Status

4. Procedures for the Conduct of Needs Assessments, Treatment of Market Responses and Evaluation of Regulated Transmission Solutions
  - 4.1 Needs Assessments
    - (a) Triggers for Needs Assessments
    - (b) [RESERVED]
    - (c) Conduct of a Needs Assessment for Rejected De-List Bids
    - (d) Notice of Initiation of Needs Assessments
    - (e) Preparation of Needs Assessment
    - (f) Treatment of Market Responses in Needs Assessments
    - (g) Needs Assessment Support
    - (h) Input from the Planning Advisory Committee
    - (i) Publication of Needs Assessment and Response Thereto
    - (j) Requirements for Use of Solutions Studies Rather than Competitive Solution Process for Projects Based on Year of Need
  - 4.2 Evaluation of Regulated Transmission Solutions in Solutions Studies, Where Competitive Solution Process of Section 4.3 Is Not Applicable
    - (a) Evaluation and Development of Regulated Transmission Solutions in Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades
    - (b) Notice of Initiation of a Solutions Study
    - (c) Classification of Regulated Transmission Solutions as Market Efficiency Transmission Upgrades or Reliability Transmission Upgrades
    - (d) Evaluation Factors Used for Identification of the Preferred Solution
    - (e) Identification of the Preferred Solution and Inclusion of Results of Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades in the RSP
    - (f) Cancellation of a Solutions Study
  - 4.3 Competitive Solution Process for Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades
    - (a) Initiating the Competitive Solution Process
    - (b) Use and Control of Right of Way
    - (c) Information Required for Phase One Proposals; Study Deposit; Timing

- (d) LSP Coordination
- (e) Preliminary Review by ISO
- (f) Proposal Deficiencies: Further Information
- (g) Listing of Qualifying Phase One Proposals
- (h) Information Required for Phase Two Solutions;  
Identification and Reporting of Preliminary Preferred Phase Two Solution
- (i) Reimbursement of Phase Two Solution Costs; Collection and Refund of ISO  
Study Costs
- (j) Selection of the Preferred Phase Two Solution
- (k) Execution of Selected Qualified Transmission Project Sponsor Agreement
- (l) Failure to Proceed
- (m) Cancellation of a Request for Proposal

4A. Public Policy Transmission Studies; Public Policy Transmission Upgrades

4A.1 NESCOE Requests for Public Policy Transmission Studies

4A.1.1 Study of Federal Public Policy Requirements Not Identified by NESCOE; Local  
Public Policy Requirements

4A.2 Preparation for Conduct of Public Policy Transmission Studies; Stakeholder  
Input

4A.3 Public Policy Transmission Studies; Stakeholder Input

- (a) Conduct of Public Policy Transmission Studies; Stakeholder Input
- (b) Treatment of Market Solutions in Public Policy Transmission Studies

4A.4 Response to Public Policy Transmission Studies

4A.5 Use and Control of Right of Way

4A.6 Stage One Proposals

- (a) Information Required for Stage One Proposals
- (b) LSP Coordination
- (c) Preliminary Review by ISO
- (d) Proposal Deficiencies; Further Information
- (e) List of Qualifying Stage One Proposals

4A.7 Reimbursement of Stage One Proposal and Stage Two Solution Costs; Collection and  
Refund of ISO Study Costs



- 4A.8 Information Required for Stage Two Solutions; Identification and Reporting of Preliminary Preferred Stage Two Solution
- 4A.9 Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List; Milestone Schedules; Removal From RSP Project List
  - (a) Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List
  - (b) Execution of Selected Qualified Transmission Project Sponsor Agreement
  - (c) Failure to Proceed
- 4A.10 Cancellation of a Request for Proposal
- 4A.11 Local Public Policy Transmission Upgrades
- 4B. Qualified Transmission Project Sponsors
  - 4B.1 Periodic Evaluation of Applications
  - 4B.2 Information To Be Submitted
  - 4B.3 Review of Qualifications
  - 4B.4 List of Qualified Transmission Project Sponsors
  - 4B.5 Annual Certification
- 5. Supply of Information and Data Required for Regional System Planning
- 6. Regional, Local and Interregional Coordination
  - 6.1 Regional Coordination
  - 6.2 Local Coordination
  - 6.3 Interregional Coordination
    - (a) Interregional Coordination and Cost Allocation Among ISO, New York Independent System Operator, Inc. (“NYISO”) and PJM Interconnection, L.L.C (“PJM”) Under Order No. 1000
    - (b) Other Interregional Assessments and Other Interregional Transmission Projects
- 7. Procedures for Development and Approval of the RSP
  - 7.1 Initiation of RSP
  - 7.2 Draft RSP; Public Meeting
  - 7.3 Action by the ISO Board of Directors on RSP; Request for Alternative Proposals

- (a) Action by ISO Board of Directors on RSP
  - (b) Requests for Alternative Proposals
- 8. Obligations of PTOs to Build; PTOs' Obligations, Conditions and Rights
- 9. Merchant Transmission Facilities
  - 9.1 General
  - 9.2 Operation and Integration
  - 9.3 Control and Coordination
- 10. Cost Responsibility for Transmission Upgrades
- 11. Allocation of ARR
- 12. Dispute Resolution Procedures
  - 12.1 Objective
  - 12.2 Confidential Information and CEII Protections
  - 12.3. Eligible Parties
  - 12.4 Scope
    - (a) Reviewable Determinations
    - (b) Material Adverse Impact
  - 12.5 Notice and Comment
  - 12.6 Dispute Resolution Procedures
    - (a) Resolution Through the Planning Advisory Committee
    - (b) Resolution Through Informal Negotiations
    - (c) Resolution Through Alternative Dispute Resolution
  - 12.7 Notice of Dispute Resolution Process Results
- 13. Rights Under The Federal Power Act
- 14. Annual Assessment of Transmission Transfer Capability

- 15. Procedures for the Conduct of Cluster Enabling Transmission Upgrades Regional Planning Study
  - 15.1 Notice of Initiation of Cluster Enabling Transmission Upgrade Regional Planning Study in Support of Cluster Studies under the Interconnection Procedures
  - 15.2 Preparation for Conduct of CRPS; Stakeholder Input
  - 15.3 Conduct of the CRPS
  - 15.4 Publication of the CRPS
  
- 16. Procedures for the Conduct of Longer-Term Transmission Studies
  - 16.1 Request for Longer-Term Transmission Studies
  - 16.2 Preparation for Conduct of the Longer-Term Transmission Studies; Stakeholder Input
  - 16.3 Conduct of the Longer-Term Transmission Study; Stakeholder Input
  
- 17. Procedures for the Conduct of Economic Studies
  - 17.1 Overview
  - 17.2 Economic Study Reference Scenarios
    - (a) Benchmark Scenario
    - (b) Market Efficiency Needs Scenario
    - (c) Policy Scenario
    - (d) Stakeholder-Requested Scenario
  - 17.3 Frequency, Initiation, and Schedule
  - 17.4 Preparation of the Economic Study Reference Scenarios and Stakeholder Sensitivity Requests
  - 17.5 Market Efficiency Needs Assessment
  - 17.6 Evaluation of Regulated Transmission Solutions for Market Efficiency Transmission Upgrades
  - 17.7 Stakeholder Input on Study Results
  - 17.8 Economic Studies Requested by Individual Stakeholders
  - 17.9 Cost Recovery
  - 17.10 Coordination with PTOs

APPENDIX 2 – LIST OF ENTITIES ENROLLED IN THE TRANSMISSION PLANNING REGION

APPENDIX 3 – LIST OF QUALIFIED TRANSMISSION PROJECT SPONSORS

## **1. Overview**

This Attachment describes the regional system planning process conducted by the ISO, as well as the coordination with transmission-owning entities in, or other entities interconnected to, the New England Transmission System and neighboring systems to ensure the reliability of the New England Transmission System and compliance with national and regional planning standards, criteria and procedures, while accounting for market performance, economic, environmental, and other considerations, as may be agreed upon from time to time. The New England Transmission System is comprised of PTF, Non-PTF, OTF and MTF within the New England Control Area that is under the ISO's operational authority or control pursuant to the ISO Tariff and/or various transmission operating agreements. This Attachment describes the regional system planning process for the PTF conducted by the ISO, and local system planning process conducted by the PTOs, pursuant to their responsibilities defined in the Tariff, the various transmission operating agreements and this Attachment. Additional details regarding the regional system planning process are also provided in the ISO New England Planning Procedures and ISO New England Operating Procedures, which are available on the ISO's website.

The ISO shall conduct the regional system planning process for the PTF in coordination with the transmission-owning entities in, or other entities interconnected to, the New England Transmission System and neighboring systems, consistent with the rights and obligations defined in the Tariff, applicable transmission operating agreements and this Attachment. As described in this Attachment's Section 6 and Appendix 1, entitled "Attachment K -Local System Planning Process", the PTOs are responsible for the Local System Planning ("LSP") process for the Non-PTF in the New England Transmission System. As also described in Section 6, and pursuant to the Tariff and/or transmission operating agreements, the OTOs and MTOs are required to participate in the ISO's regional system planning process for reliability purposes and to perform and/or support studies of the impact of regional system planning projects on their respective OTF and MTF.

The regional system planning process described in this Attachment provides for the ISO to undertake assessments of the needs of the PTF system on a systemwide or specific area basis. These assessments shall be referred to as Needs Assessments, as described in Section 4.1 of this Attachment. The ISO shall incorporate market responses that have met the criteria specified in Sections 4.1(f) and 4A.3(b) of this Attachment into the Needs Assessments, Public Policy Transmission Studies or the Regional System Plan ("RSP"), described below. Where market responses incorporated into the Needs Assessments or Public

Policy Transmission Studies do not eliminate or address the needs identified by the ISO in Needs Assessments, Public Policy Transmission Studies or the RSP, the ISO shall develop or evaluate, pursuant to Sections 4.2(b), 4.3, or 4A of this Attachment, as applicable, regulated transmission solutions proposed in response to the needs identified by the ISO.

Pursuant to Sections 3 and 7 of this Attachment, the ISO shall develop the RSP for approval by the ISO Board of Directors following stakeholder input through the Planning Advisory Committee established pursuant to Section 2 of this Attachment. The RSP is a compilation of the regional system planning process activities conducted by the ISO. The RSP shall address needs of the PTF system determined by the ISO through Needs Assessments initiated and updated on an ongoing basis by the ISO to: (i) account for changes in the PTF system conditions; (ii) ensure reliability of the PTF system; (iii) comply with national and regional planning standards, criteria and procedures; and (iv) account for market performance, economic, environmental and other considerations as may be agreed upon from time to time.

As more fully described in Section 3 of this Attachment, the RSP shall identify:

- (i) PTF system reliability and market efficiency needs,
- (ii) the requirements and characteristics of the types of resources that may satisfy PTF system reliability and market efficiency needs to provide stakeholders an opportunity to develop and propose efficient market responses to meet the needs identified in Needs Assessments;
- (iii) regulated transmission solutions to meet the needs identified in Needs Assessments where market responses do not address such needs or additional transmission infrastructure may be required to comply with national and regional planning standards, criteria and procedures or provide market efficiency benefits in accordance with Attachment N of this OATT; and
- (iv) those projects identified through the Public Policy procedures described in Section 4A of this Attachment K.

In addition, the RSP shall also provide information on a broad variety of power system requirements that serves as input for reviewing the design of the markets and the overall economic performance of the system. The RSP shall also describe the coordination of the ISO's regional system plans with regional, local and inter-area planning activities.

Pursuant to Section 3.6 of this Attachment, the ISO shall also develop, maintain and post on its website a cumulative list reflecting the regulated transmission solutions proposed in response to Needs Assessments (the "RSP Project List"). The RSP Project List shall be a cumulative representation of the regional transmission planning expansion efforts ongoing in New England.

### **1.1 Enrollment**

For purposes of participating as a transmission provider in the New England transmission planning region pursuant to this Attachment K, and distinct from Transmission Providers as defined in Section I of this Tariff, an entity chooses to enroll by executing (or having already executed) a: (i) transmission operating agreement with the ISO, or (ii) a Market Participant Service Agreement coupled with a written notification to the ISO that the entity desires to be a transmission provider in the New England region. Such enrollment in the transmission planning region is not necessary to participate in the Planning Advisory Committee, which is open to any entity as described in Section 2.3 of this Attachment K.

### **1.2 A List of Entities Enrolled in the Planning Region**

A list of entities enrolled in the transmission planning region as transmission providers as described in Section 1.1. above, is included as Appendix 2 of this Attachment K.

## **2. Planning Advisory Committee**

### **2.1 Establishment**

A Planning Advisory Committee shall be established by the ISO to perform the functions set forth in Section 2.2 of this Attachment. It shall have a Chair and Secretary, who shall be appointed by the chief executive officer of the ISO or his or her designee. Before appointing an individual to the position of the Chair or Secretary, the ISO shall notify the Planning Advisory Committee of the proposed assignment and, consistent with its personnel practices, provide any other information about the individual reasonably requested by the Planning Advisory Committee. The chief executive officer of the ISO or his or her designee shall consider the input of the members of the Planning Advisory Committee in selecting,

removing or replacing such officers. The Planning Advisory Committee shall be advisory only and shall have no formal voting protocol.

The ISO may form subcommittees that, at the discretion of the ISO, may report to the Planning Advisory Committee.

## **2.2 Role of Planning Advisory Committee**

The Planning Advisory Committee may provide input and feedback to the ISO concerning the regional system planning process, including the development of and review of Needs Assessments, the conduct of Solutions Studies, the development of the RSP, and updates to the RSP Project List. Specifically, the Planning Advisory Committee serves to review and provide input and comment on: (i) the development of the RSP, (ii) assumptions for studies, (iii) the results of Needs Assessments, Solutions Studies, and competitive solutions developed pursuant to Section 4.3 of this Attachment, (iv) potential market responses to the needs identified by the ISO in a Needs Assessment or the RSP, (v) Cluster Enabling Transmission Upgrades Regional Planning Studies, and (vi) Longer-Term Transmission Studies. The Planning Advisory Committee, with the assistance of and in coordination with the ISO, serves also to identify and prioritize the Stakeholder-Requested Scenario and stakeholder-requested scenario sensitivities for Economic Studies to be performed by the ISO, and provides input and feedback to the ISO concerning the conduct of Economic Studies and Public Policy Transmission Studies, including the criteria and assumptions for such studies. Based on input and feedback related to the regional system planning process provided by the Planning Advisory Committee to the ISO, the ISO shall consult with the appropriate NEPOOL technical committees, including but not limited to, the Markets, Reliability and Transmission Committees, on issues and concerns identified by the Planning Advisory Committee as requiring further investigation and consideration of potential changes to ISO New England Operating Documents.

## **2.3 Membership**

There are no membership requirements to become part of the Planning Advisory Committee. Meetings are open to members of any entity, including State regulators or agencies and NESCOE, subject to the Critical Energy Infrastructure Information (“CEII”) policy as further described in Section 2.4(d) of this Attachment. To be added to the Planning Advisory Committee email distribution list, an email address shall be provided to the Secretary of the Committee. Throughout this Attachment K, a member of the



Planning Advisory Committee refers to any individual, whether they attend Planning Advisory Committee meetings or are included on the email distribution list.

## **2.4 Procedures**

### **(a) Notice of Meetings**

Prior to the beginning of each year, the ISO shall list on the ISO Calendar, which is available on the ISO's website, the proposed meeting dates for the Planning Advisory Committee for each month of the year. Prior to a Planning Advisory Committee meeting, the ISO shall provide notice to the Planning Advisory Committee by electronic email with the date, time, format for the meeting (i.e., in person or teleconference), and the purpose for the meeting.

### **(b) Frequency of Meetings**

Meetings of the Planning Advisory Committee shall be held as frequently as necessary to serve the purposes stated in Section 2.2 of this Attachment and as further specified elsewhere in this Attachment, generally expected to be no less than four (4) times per year.

### **(c) Availability of Meeting Materials**

The ISO shall post materials for Planning Advisory Committee meetings on the Planning Advisory Committee section on the ISO's website prior to meetings. The materials for the Planning Advisory Committee meetings shall be made available to the members of the Planning Advisory Committee subject to protections warranted by confidentiality requirements of the ISO New England Information Policy set forth in Attachment D of the ISO Tariff and Critical Energy Infrastructure Information ("CEII") policy as further described in Section 2.4(d) of this Attachment.

### **(d) Access to Planning-Related Materials that Contain CEII**

CEII is defined as specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that:

- (i) Relates details about the production, generation, transportation, transmission, or distribution of energy;
- (ii) Could be useful to a person in planning an attack on critical infrastructure;
- (iii) Is exempt from mandatory disclosure under the Freedom of Information Act, 5 U.S.C. 552; and
- (iv) Does not simply give the location of critical infrastructure.

CEII pertains to existing and proposed system and assets, whether physical or virtual, the incapacity or destruction of which would negatively affect security, economic security, public health or safety, or any combination of those matters. CEII does not include information that is otherwise publicly available. Simplified maps and general information on engineering, vulnerability, or design that relate to production, generation, transportation, transmission or distribution of energy shall not constitute CEII.

Planning-related materials determined to be CEII will be posted on the ISO's password-protected website. To obtain access to planning-related materials determined to be CEII, the entity seeking to obtain such access must contact the ISO's Customer Service department. Authorized Market Participants or their representatives, such as consultants, are bound by the ISO New England Information Policy and will be able to access CEII materials through the ISO's password-protected website. State and federal governmental agency employees and their consultants will be able to access such materials through the ISO's password-protected website upon submittal of a signed non-disclosure agreement, which is available on the ISO's website. Personnel of the ERO, NPCC, other regional transmission organizations or independent system operators, and transmission owners from neighboring regions will be able to access CEII materials pursuant to governing agreements, rules and protocols. All external requests by other persons for planning-related materials determined to be CEII shall be recorded and tracked by ISO's Customer Services staff. Such requestors will be able to obtain access to CEII documents filed with the Commission pursuant to the Commission's regulations governing access to CEII. To the extent a requestor seeks access to planning-related material that is not filed with the Commission, such requestor shall comply with the requirements provided in the CEII procedures of the ISO, available on the ISO's website, prior to receiving access to CEII

information. Upon compliance with the ISO's CEII procedures, the ISO shall grant the requestor access to the planning-related CEII document through direct distribution or access to the ISO password-protected website.

## **2.5 Local System Planning Process**

The LSP process described in Appendix 1 to this Attachment applies to the transmission system planning for the Non-PTF in the New England Transmission System. The PTOs will utilize interested members of the Planning Advisory Committee for advisory stakeholder input in the LSP process that will meet, as needed, at the conclusion of, or independent of, scheduled Planning Advisory Committee meetings. The LSP meeting agenda and meeting materials will be developed by representatives of the pertinent PTOs and PTO representatives will chair the LSP meeting. The ISO will post the LSP agenda and materials for LSP.

## **3. RSP: Principles, Scope, and Contents**

### **3.1 Description of RSP**

The ISO shall develop the RSP based on periodic comprehensive assessments (conducted not less than every third year) of the PTF systemwide needs to maintain the reliability of the New England Transmission System while accounting for market efficiency, economic, environmental, and other considerations, as agreed upon from time to time. The ISO shall update the RSP to reflect the results of ongoing Needs Assessments conducted pursuant to Section 4.1 of this Attachment. The RSP shall also account for projected improvements to the PTF that are needed to maintain system reliability in accordance with national and regional standards and the operation of efficient markets under a set of planning assumptions.

The RSP shall, among other things:

- (i) describe, in a consolidated manner, the assessment of the PTF system needs, the results of such assessments, and the projected improvements;
- (ii) provide the projected annual and peak demands for electric energy for a five-to ten-year horizon, the needs for resources over this period and how such resources are expected to be provided;

- (iii) specify the physical characteristics of the physical solutions that can meet the needs defined in the Needs Assessments and include information on market responses that can address them; and
- (iv) provide sufficient information to allow Market Participants to assess the quantity, general locations, operating characteristics and required availability criteria of the type of incremental supply or demand-side resources, or merchant transmission projects, that would satisfy the identified needs or that may serve to modify, offset or defer proposed regulated transmission upgrades.

The RSP shall also include a description of proposed regulated transmission solutions that, based on the Solutions Studies described in Section 4.2 of this Attachment and the competitive solution process described in Section 4.3 of this Attachment, meets the needs identified in the Needs Assessments. To this end, as further described in Section 3.6 below, the ISO shall develop and maintain a RSP Project List, a cumulative listing of proposed regulated transmission solutions classified, to the extent known, as Reliability Transmission Upgrades, Market Efficiency Transmission Upgrades, and Public Policy Transmission Upgrades (which, for the foregoing types of upgrades, may include the portions of Interregional Transmission Projects located within the New England Control Area) and of External Transmission Projects. The RSP shall also provide reasons for any new regulated transmission solutions or Transmission Upgrades included in the RSP Project List, any change in status of a regulated transmission solution or Transmission Upgrade in the RSP Project List, or for any removal of regulated transmission solutions or Transmission Upgrades from the RSP Project List that are known as of that time.

Each RSP shall be built upon the previous RSP.

### **3.2 Baseline of RSP**

The RSP shall account for: (i) all projects that have met milestones, including market responses and regulated transmission solutions (e.g., planned demand-side projects, generation and transmission projects and Elective Transmission Upgrades) as determined by the ISO, in collaboration with the Planning Advisory Committee, pursuant to Sections 4.1, 4.2, 4.3, and 4A of this Attachment; and (ii) the

requirements for system operation and restoration services, not including the development of a system operations or restoration plan, which is outside the scope of the regional system planning process.

### **3.3 RSP Planning Horizon and Parameters**

The RSP shall be based on a five-to ten-year planning horizon, and reflect five-to ten-year capacity and load forecasts.

The RSP shall conform to: Good Utility Practice; applicable Commission compliance requirements related to the regional system planning process; applicable reliability principles, guidelines, criteria, rules, procedures and standards of the ERO, NPCC, and any of their successors; planning criteria adopted and/or developed by the ISO; Transmission Owner criteria, rules, standards, guides and policies developed by the Transmission Owner for its facilities consistent with the ISO planning criteria, the applicable criteria of the ERO and NPCC; local transmission planning criteria; and the ISO New England Planning Procedures and ISO New England Operating Procedures, as they may be amended from time to time (collectively, the “Planning and Reliability Criteria”).

The revisions to this Attachment K submitted to comply with FERC’s Order No. 1000 shall not apply to any Proposed or Planned project included in an RSP approved by the ISO Board of Directors (or in an RSP Project List update) prior to the May 18, 2015 effective date of the Order No. 1000 compliance filing of the ISO and the PTOs, unless the ISO is re-evaluating the solution design for such project as of that effective date, or subsequently determines that the solution design for such project requires re-evaluation.

### **3.4 Other RSP Principles**

The RSP shall be designed and implemented to: (i) avoid unnecessary duplication of facilities; (ii) identify facilities that are necessary to meet Planning and Reliability Criteria; (iii) avoid the imposition of unreasonable costs upon any Transmission Owner, Transmission Customer or other user of a transmission facility; (iv) take into account the legal and contractual rights and obligations of the Transmission Owners and the transmission-related legal and contractual rights and obligations of any other entity; (v) provide for coordination with existing transmission systems and with appropriate inter-area and local expansion plans; and (vi) properly coordinate with market responses, including, but not limited to generation, merchant transmission and demand-side responses.

### **3.5 Market Responses in RSP**

Market responses shall include investments in resources (e.g., demand-side projects, generation and distributed generation) and Elective Transmission Upgrades and shall be evaluated by the ISO, in consultation with the Planning Advisory Committee, pursuant to Sections 4.1(f), 4A.3(b), and 7 of this Attachment.

In developing the RSP, the ISO shall account for market responses: (i) proposed by Market Participants as addressing needs (and any critical time constraints for addressing such needs) identified in an RSP, Needs Assessment, or Public Policy Transmission Study; and (ii) that have proved to be viable by meeting the criteria specified in Section 4.1(f) or 4A.3(b) of this Attachment, as applicable.

Specifically, market responses that are identified to the ISO and are determined by the ISO, in consultation with the Planning Advisory Committee, to be sufficient to alleviate the need for a particular regulated transmission solution or Transmission Upgrade, based on the criteria specified in the pertinent Needs Assessment or RSP, and are judged by the ISO to be achievable within the required time period, shall be reflected in the next RSP and/or in a new or updated Needs Assessment. That particular regulated transmission solution or Transmission Upgrade may continue to be included in the appropriate category on the RSP Project List (as described in Section 3.6 below), subject to the ISO having the flexibility to indicate that the project should proceed at a later date or it may be removed if it is determined to be no longer needed. If the market response does not fully address the defined needs, or if additional transmission infrastructure is required to facilitate the efficient operation of the market, the RSP shall also include that particular regulated transmission solution or Transmission Upgrade, subject to the ISO having the flexibility to indicate that the Transmission Upgrade or regulated transmission solution should proceed at a later date and be modified, if necessary.

### **3.6 The RSP Project List**

#### **(a) Elements of the RSP Project List**

The RSP Project List shall identify regulated transmission solutions proposed in response to the needs identified in a RSP or Needs Assessments conducted pursuant to Section 4.1 of this Attachment, and shall identify Public Policy Transmission Upgrades identified pursuant to Section 4A of this Attachment. The RSP Project List shall identify the proposed regulated transmission solutions separately as a Reliability Transmission

Upgrade, a Market Efficiency Transmission Upgrade, or a Public Policy Transmission Upgrade.

With regard to Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades, the following subcategories will be utilized to indicate the status of each proposed regulated transmission solution in the evaluation process. These subcategories include: (i) Proposed; (ii) Planned; (iii) Under Construction; and (iv) In-Service. A Public Policy Transmission Upgrade will be identified in the RSP Project List as (i) Proposed; (ii) Planned; (iii) Under Construction; or (iv) In-Service.

The regulated transmission solution subcategories are defined as follows:

(i) For purposes of Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades, “Proposed” shall include a regulated transmission solution that (a) has been proposed in response to a specific need identified by the ISO in a Needs Assessment or the RSP and (b) has been evaluated or further defined and developed in a Solutions Study, as specified in Section 4.2(a) of this Attachment, or in the competitive solutions process specified in Section 4.3 of this Attachment, such that there is significant analysis that supports a determination by the ISO, as communicated to the Planning Advisory Committee, that the proposed regulated transmission solution would likely meet the need identified by the ISO in a Needs Assessment or the RSP, but has not received approval by the ISO under Section I.3.9 of the Tariff.

For purposes of Public Policy Transmission Upgrades, “Proposed” means that the ISO has included the project in the RSP Project List pursuant to the procedures described in Section 4A of this Attachment K, but that the project has not yet been approved by the ISO under Section I.3.9 of the Tariff.

(ii) “Planned” shall include a Transmission Upgrade that has met the requirements for a Proposed project and has been approved by the ISO under Section I.3.9 of the Tariff.

(iii) “Under Construction” shall include a Transmission Upgrade that has received the approvals required under the Tariff and engineering and construction is underway.

(iv) “In Service” shall include a Transmission Upgrade that has been placed in commercial operation.

The RSP Project List shall also list External Transmission Projects for which cost allocation and, if applicable, operating agreements have been accepted by the Commission, and indicate whether such External Transmission Projects are proposed, under construction or in service.

Each Reliability Transmission Upgrade and Market Efficiency Transmission Upgrade shall be cross-referenced to the specific systemwide or area needs identified in a Needs Assessment or RSP. Each proposed Public Policy Transmission Upgrade shall be cross-referenced in the RSP Project List to a specific Public Policy Transmission Study.

For completeness, the RSP Project List shall also include Elective Transmission Upgrades and transmission facilities (as determined under the ISO interconnection process specified in this OATT) to be built to accommodate new generation, and Elective Transmission Upgrades that have satisfied the requirements of this OATT.

An Interregional Transmission Project developed pursuant to Section 6.3 of this Attachment K may displace a regional Reliability Transmission Upgrade or Market Efficiency Transmission Upgrade on the RSP Project List where the ISO has determined that the Interregional Transmission Project is a more efficient or cost-effective solution. In the case of an Interregional Transmission Project that could meet the needs met by a Public Policy Transmission Upgrade, the associated Public Policy Transmission Upgrade may be removed from the RSP Project List in the circumstances described, and using the procedures specified, in Section 4A of Attachment K.

**(b) Periodic Updating of RSP Project List**



The RSP Project List will be updated by the ISO periodically by adding, removing or revising regulated transmission solutions or Transmission Upgrades in consultation with the Planning Advisory Committee and, as appropriate, the Reliability Committee.

Updating of the RSP Project List shall be considered an update of the RSP to be reflected in the next RSP, as appropriate, pursuant to Section 3.1 of this Attachment.

**(c) RSP Project List Updating Procedures and Criteria**

As part of the periodic updating of the RSP Project List, the ISO: (i) shall modify (in accordance with the provisions of this Attachment) regulated transmission solutions or Transmission Upgrades to reflect changes to the PTF system configurations, including ongoing investments by Market Participants or other stakeholders; (ii) may add to and classify accordingly, regulated transmission solutions; (iii) may remove from the RSP Project List regulated transmission solutions or Transmission Upgrades previously identified in the RSP Project List if the ISO determines that the need for the proposed regulated transmission solution or the approved Transmission Upgrade no longer exists or is no longer feasible; and (iv) may remove from the RSP Project List regulated transmission solutions or Transmission Upgrades that have been displaced by an Interregional Transmission Project in the circumstances described in Section 3.6(a) of this Attachment. With regard to (iii) above, this may include a removal of a regulated transmission solution or Transmission Upgrade because a market response meeting the need reaches the maturity specified in Sections 4.1(f) or 4A.3(b) of this Attachment and has been determined, pursuant to Sections 4.1(f) or 4A.3(b) of this Attachment, to meet the need described in the pertinent Needs Assessment, Public Policy Transmission Study or RSP, as applicable. In doing so, the ISO shall consult with and consider the input from the Planning Advisory Committee and, as appropriate, the Reliability Committee. In addition, the ISO shall remove from the RSP Project List any Public Policy Transmission Upgrade if the ISO determines, with input from the Planning Advisory Committee, that the need to which the Public Policy Transmission Upgrade responds no longer exists.

If a regulated transmission solution or Transmission Upgrade is removed from the RSP Project List by the ISO, the entity responsible for the construction of the regulated

transmission solution or Transmission Upgrade shall be reimbursed for any costs prudently incurred or prudently committed to be incurred (plus a reasonable return on investment at existing Commission-approved ROE levels) in connection with the planning, designing, engineering, siting, permitting, procuring and other preparation for construction, and/or construction of the regulated transmission solution or Transmission Upgrade proposed for removal from the RSP Project List. The provisions of Schedule 12, Schedule 13 and Schedule 14 of this OATT shall apply to any cost reimbursement under this Section. Prior to finalizing the RSP, the ISO shall provide the Planning Advisory Committee with written information explaining the reasons for any removal under this Section.

**(d) Posting of LSP Project Status**

Each PTO will be individually responsible for publicly posting and updating the status of its respective LSP and the transmission projects arising therefrom on its company website. The ISO's posting of the RSP Project Lists will include links to each PTO's specific LSP posting to be provided to the ISO by the PTOs.

**4. Procedures for the Conduct of Needs Assessments, Treatment of Market Responses and Evaluation of Regulated Transmission Solutions**

**4.1 Needs Assessments**

The regional system planning process established in this Attachment K has three different processes. The reliability planning process established in this Attachment K shall apply to all transmission solutions adopted to resolve a reliability need. The market efficiency planning process established in this Attachment K shall apply to all transmission solutions adopted to resolve a market efficiency need. The public policy planning process established in this Attachment K shall apply to all transmission solutions adopted to resolve a public policy need.

As described further in Section 4.1(a) below, the planning process in Section 17 of this Attachment K shall be used to identify market efficiency issues and, along with Section 4.1(a), trigger market efficiency Needs Assessments. Market efficiency Needs Assessments shall be conducted pursuant to this Section 4.

For needs identified initially as reliability, market efficiency or public policy needs, the collateral benefits of potential solutions to those needs shall not change the planning process applicable to those identified needs; notwithstanding the foregoing, the ISO shall report its views as to whether a project or preferred solution may also satisfy identified reliability needs of the system as described in Section 4A.8 of this Attachment K. Sections 4.1 through 4.3 of this Attachment are not applicable to the planning of Public Policy Transmission Upgrades, which is governed instead by Section 4A of this Attachment.

On a regular and ongoing basis, the ISO, in coordination with the PTOs and the Planning Advisory Committee, shall conduct assessments (i.e., Needs Assessments) of the adequacy of the PTF system, as a whole or in part, to maintain the reliability of such facilities (i.e., reliability Needs Assessment) and the operation of efficient wholesale electric markets in New England (i.e., market efficiency Needs Assessment). A Needs Assessment shall analyze whether the PTF in the New England Transmission System: (i) meet applicable reliability standards; (ii) have adequate transfer capability to support local, regional, and inter-regional reliability; (iii) support the efficient operation of the wholesale electric markets; (iv) are sufficient to integrate new resources and loads on an aggregate or regional basis; or (v) otherwise examine various aspects of its performance and capability. A Needs Assessment shall also identify: (i) the location and nature of any potential problems with respect to the PTF and (ii) situations that significantly affect the reliable and efficient operation of the PTF along with any critical time constraints for addressing the needs of the PTF to facilitate the development of market responses and to initiate the pursuit of regulated transmission solutions.

**(a) Triggers for Needs Assessments**

The ISO, in coordination with the PTOs and the Planning Advisory Committee, shall perform Needs Assessments, inter alia, as needed to:

- Assess compliance with reliability standards and criteria (including those established by the ISO, NERC, and NPCC) consistent with the long term needs of the system.
- Assess the adequacy of the transmission system capability, such as transfer capability, to support local, regional and interregional reliability.
- Assess the efficient operation of the wholesale electric market. (See Attachment N regarding the identification of market efficiency upgrades).

- Assess sufficiency of the system to integrate new resources and loads on an aggregate or regional basis as needed for the reliable and efficient operation of the system.
- Analyze various aspects of system performance. (Including but not limited to, transient network analysis, small signal analysis, electromagnetic transients program analysis, or delta P analysis).
- Examine short circuit performance of the system.
- Assess the ability to efficiently operate and maintain the transmission system.
- Address market efficiency issues.
- Address system performance in consideration of de-list bids and cleared demand bids consistent with sections 4.1(c) and 4.1(f) of Attachment K.
- Address system performance as otherwise deemed appropriate by the ISO.

**(b) [RESERVED]**

**(c) Conduct of a Needs Assessment for Rejected De-List Bids**

- (i) In the case of a rejected Static De-List Bid or Dynamic De-List Bid, the ISO may as warranted, with advisory input from the Reliability Committee, examine the unavailability of the resource(s) with the rejected bid as a sensitivity in a Needs Assessment, or examine the unavailability of the resource(s) in the base representation in a Needs Assessment. The ISO may as warranted, with advisory input from the Reliability Committee, initiate a Needs Assessment for the purpose of modeling rejected Static De-List Bids or Dynamic De-List Bids where the ISO believes that the initiation of such a study is warranted.
- (ii) Prior to the start of each New Capacity Show of Interest Submission Window, the ISO shall present to the Reliability Committee the status of any prior rejected Dynamic De-

List Bids, Static De-List Bids, Permanent De-List Bids or Retirement De-List Bids being studied in the regional system planning process.

**(d) Notice of Initiation of Needs Assessments**

Prior to its commencement, the ISO shall provide notice of the initiation of a Needs Assessment to the Planning Advisory Committee consistent with Section 2 of this Attachment.

**(e) Preparation of Needs Assessment**

Needs Assessments may examine resource adequacy, transmission adequacy, projected congestion levels and other relevant factors as may be agreed upon from time to time. Needs Assessments shall also consider the views, if any, of the Planning Advisory Committee, State regulators or agencies, NESCOE, the Market Advisor to the ISO Board of Directors, and the ISO Board of Directors. A corresponding assessment shall be performed by the PTOs to identify any needs relating to the Non-PTF transmission facilities (of whatever voltage) that could affect the provision of Regional Transmission Service over the PTF.

**(f) Treatment of Market Responses in Needs Assessments**

The ISO shall reflect proposed market responses in the regional system planning process. Market responses may include, but are not limited to, resources (e.g., demand-side projects and distributed generation), and Elective Transmission Upgrades.

In performing Needs Assessments, the ISO shall rely on certain resources to prevent the identification of system needs. Specifically, the ISO shall incorporate or update information regarding future resources, with the exception of imports across external tie lines, in Needs Assessments that have been proposed and (i) have cleared in a Forward Capacity Auction pursuant to Market Rule 1 of the ISO Tariff, (ii) have been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) have been forecast in the ISO's Forecast Report of Capacity, Energy, Loads and Transmission. The ISO shall also incorporate or update information regarding all existing resources, with the exception of imports across external tie lines, in Needs Assessments. Imports across future or existing external tie lines will not be relied upon unless such imports (i) have a Capacity Supply Obligation corresponding to the year of study, (ii) have

been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) may be represented by a minimum flow based on HQ Interconnection Capability Credits. The ISO will model out-of-service all submitted Retirement De-List Bids, submitted Permanent De-List Bids, and demand bids that have cleared in a substitution auction, and may model out-of-service rejected-for-reliability Static De-List Bids and rejected-for-reliability Dynamic De-List Bids from the most recent Forward Capacity Auction. With respect to having been selected in, and being contractually bound by a state-sponsored request for proposals, or having a financially binding obligation pursuant to a contract, demonstration of such contracts is accomplished through submittal for ISO review of an order or other similar authorization from the appropriate state regulatory agency, along with a copy of the contract, that together demonstrate the contractual requirements. These documents may be submitted by: the Project Sponsor; the state regulatory agency authorizing the contract; a transmission company that is a counterparty to the contract; or by a third-party organization representing the interests of the New England states regarding energy related issues, such as NESCOE. The ISO shall incorporate or update information regarding a proposed Elective Transmission Upgrade in a Needs Assessment at a time after the studies corresponding to the Elective Transmission Upgrade are completed (including receipt of approval under Section I.3.9 of the Tariff), a commercial operation date has been ascertained, and for which the certification has been accepted in accordance with Section III.12 of the Tariff. In the case where the Elective Transmission Upgrades are proposed in conjunction with the interconnection of a resource, these Elective Transmission Upgrades shall be considered at the same time as the proposed resource is considered in the Needs Assessment provided that the studies corresponding to the Elective Transmission Upgrade are completed (including receipt of approval under Section I.3.9 of the Tariff), a commercial operation date has been ascertained, and for which the certification has been accepted in accordance with Section III.12 of the Tariff.

**(g) Needs Assessment Support**

For the development of the Needs Assessments, the ISO will coordinate with the PTOs and the Planning Advisory Committee to support the ISO's performance of Needs Assessments. To facilitate this support, the ISO will post on its website the models, files, cases, contingencies, assumptions and other information used to perform Needs Assessments. The ISO may establish requirements that any PTO or member of the Planning Advisory Committee must satisfy in order

to access certain information used to perform Needs Assessments, due to ISO New England Information Policy and CEII constraints. The ISO may ask PTOs or Planning Advisory Committee members with special expertise to provide technical support or perform studies required to assess one or more potential needs that will be considered in the Needs Assessments process. These entities will provide, and the ISO will post on its website, the models, files, cases, contingencies, assumptions and other information used by those entities to perform studies. The ISO will post the draft results of any such Needs Assessment studies on its website. The ISO will convene meetings open to any representative of an entity that is a member of the Planning Advisory Committee to facilitate input on draft Needs Assessments studies and the inputs to those studies prior to the ISO's completion of a draft Needs Assessment report to be reviewed by the entire Planning Advisory Committee pursuant to Section 4.1(i) of this Attachment. All provisions of this subsection (g) relating to the provision and sharing of information shall be subject to the ISO-NE Information Policy.

**(h) Input from the Planning Advisory Committee**

Meetings of the Planning Advisory Committee shall be convened to identify additional considerations relating to a Needs Assessment that were not identified in support of initiating the assessment, and to provide input on the Needs Assessment's scope, assumptions and procedures, consistent with the responsibilities of the Planning Advisory Committee as set forth in Section 2.2 of this Attachment.

**(i) Publication of Needs Assessment and Response Thereto**

The ISO shall report the results of Needs Assessments to the Planning Advisory Committee, subject to CEII constraints. Needs Assessments containing CEII will be posted on the ISO's password-protected website consistent with Section 2.4(d) of this Attachment. Needs Assessments will identify high-level functional requirements and characteristics for regulated transmission solutions and market responses that can meet the needs described in the assessment. Where the ISO forecasts that a solution is needed to solve reliability criteria violations in three years or less from the completion of a Needs Assessment (unless the solution to the Needs Assessment will likely be a Market Efficiency Transmission Upgrade), and the requirements of Section 4.1(j) of this Attachment have been met or where there is only one Phase One Proposal submitted in response to a request for proposal issued under Sections 4.3(a) of this Attachment or

only one proposed solution that is selected to move on as a Phase Two Solution, the ISO will evaluate the adequacy of proposed regulated solutions by performing Solutions Studies, as described in Section 4.2 of this Attachment. Where the solution to a Needs Assessment will likely be a Market Efficiency Transmission Upgrade, or where the forecast year of need for a solution that is likely to be a Reliability Transmission Upgrade is more than three years from the completion of a Needs Assessment, the ISO will conduct a solution process based on a two-stage competitive solution process, as described in Section 4.3 of this Attachment.

**(j) Requirements for Use of Solutions Studies Rather than Competitive Solution Process for Projects Based on Year of Need**

The following requirements must be met in order for the ISO to use Solutions Studies in the circumstances described in Section 4.1(i) based on the solution's year of need:

- (i) The ISO shall separately identify and post on its website an explanation of the reliability criteria violations and system conditions that the region has a time-sensitive need to solve within three years of the completion of the relevant Needs Assessment. The explanation shall be in sufficient detail to allow stakeholders to understand the need and why it is time-sensitive.
- (ii) In deciding whether to utilize Solutions Studies, such that the regulated transmission solution will be developed through a process led by the ISO and built by the PTO(s), the ISO shall:
  - (A) Provide to the Planning Advisory Committee and post on its website a full and supported written description explaining the decision to designate a PTO as the entity responsible for construction and ownership of the reliability project, including an explanation of other transmission or non-transmission options that the region considered but concluded would not sufficiently address the immediate reliability need, and the circumstances that generated the reliability need and an explanation of why that reliability need was not identified earlier.
  - (B) Provide a 15-day period during which comments from stakeholders on the posted description may be sent to the ISO, which comments will be posted on the website, as well.



- (iii) The ISO shall maintain and post on its website a list of prior year designations of all projects in the limited category of transmission projects for which the PTO(s) was designated as the entity responsible for construction and ownership of the project following the performance of Solutions Studies. The list must include the project's need-by date and the date the PTO(s) actually energized the project, i.e., placed the project into service. The ISO shall file such list with the Commission as an informational filing in January of each calendar year covering the designations of the prior calendar year, when applicable.

#### **4.2 Evaluation of Regulated Transmission Solutions in Solutions Studies, Where Competitive Solution Process of Section 4.3 Is Not Applicable**

The procedures described in this Section 4.2 shall be utilized for the evaluation of regulated transmission solutions for reliability and market efficiency needs where the requirements of Sections 4.1(i) and/or (j) of this Attachment are satisfied. Otherwise, the procedures of Section 4.3 shall be utilized for that purpose.

##### **(a) Evaluation and Development of Regulated Transmission Solutions in Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades**

In the case of Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades, the ISO, in coordination with the proponents of regulated transmission solutions and other interested or affected stakeholders, shall conduct or participate in studies ("Solutions Studies") to evaluate whether proposed regulated transmission solutions meet the PTF system needs identified in Needs Assessments. The ISO, in coordination with affected stakeholders shall also identify regulated transmission projects for addressing the needs identified in Needs Assessments.

The ISO may form ISO-led targeted study groups to conduct Solutions Studies. Such study groups will include representatives of the proponents of regulated transmission solutions and other interested or affected stakeholders. Through this process, the ISO may identify the solutions for the region that offer the best combination of electrical performance, cost, future system expandability, and feasibility to meet a need identified in a Needs Assessment in the required

time frame. These solutions may differ from a transmission solution proposed by a transmission owner.

Proponents of regulated transmission proposals in response to Needs Assessments shall also identify any LSP plans that require coordination with their regulated transmission proposals addressing the PTF system needs.

**(b) Notice of Initiation of a Solutions Study**

The ISO shall provide notice of the initiation and scope of a Solutions Study to the Planning Advisory Committee.

**(c) Classification of Regulated Transmission Solutions as Market Efficiency  
Transmission Upgrades or Reliability Transmission Upgrades**

As described in Section 3.1 and 3.6(a) of this Attachment, proposed regulated transmission solutions determined by the ISO, in consultation with the Planning Advisory Committee, to address needs identified in Needs Assessments shall be classified as a Reliability Transmission Upgrade and/or a Market Efficiency Transmission Upgrade pursuant to the standards set forth in Attachment N of this OATT.

**(d) Evaluation Factors Used for Identification of the Preferred Solution**

Factors to be considered during the evaluation process for identification of the preferred solution may include, but are not limited to, the following which are listed in no particular order:

- Installed cost;
- Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
- System performance;
- Cost cap or cost containment provisions;
- In-service date of the project or portion(s) thereof;
- Project constructability;
- Generation and transmission facility outages required during construction;
- Extreme contingency performance;
- Operational impacts;

- Incremental costs for potential resource retirements;
- Interface impacts;
- Future expandability;
- Consistency with Good Utility Practice;
- Potential siting/permitting issues or delays;
- Loss savings;
- Replacement of aging infrastructure;
- Environmental impact;
- Design standards; and
- Impact on NPCC Bulk Power System classification.

**(e) Identification of the Preferred Solution and Inclusion of Results of Solutions Studies for Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades in the RSP**

The results of Solutions Studies related to Market Efficiency Transmission Upgrades and Reliability Transmission Upgrades will be reported to the Planning Advisory Committee. After receiving feedback from the Planning Advisory Committee, the ISO will identify the preferred solution. The ISO will inform the appropriate Transmission Owners in writing regarding the identification of the preferred solution.

Once identified, the preferred solution, as appropriate, will be reflected (with an overview of why the solution is preferred) in the RSP and/or its Project List, as it is updated from time to time in accordance with this Attachment. Where external impacts of regional projects are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP. Costs associated with such impacts will be addressed as set forth in Schedule 15.

**(f) Cancellation of a Solutions Study**

The ISO may cancel a Solutions Study at any time. Such cancellation may be due to new or different assumptions which may change or eliminate the identified needs. Any costs associated with Solutions Study development shall be recovered pursuant to Section 3.6(c) of this Attachment.

#### **4.3 Competitive Solution Process for Reliability Transmission Upgrades and Market Efficiency Transmission Upgrades**

##### **(a) Initiating the Competitive Solution Process**

The ISO will publicly issue a request for proposal for which, pursuant to Section 4.1(i) of this Attachment, a competitive solution process will be utilized. The request for proposal will indicate that a Qualified Transmission Project Sponsor may submit an individual or joint Phase One Proposal(s) offering a solution that addresses the identified needs or address a subset of those needs. In the case where a joint Phase One Proposal is submitted, all parties must be Qualified Transmission Project Sponsors. A Qualified Transmission Project Sponsor may propose a comprehensive solution to address the identified needs, or a subset thereof, that includes an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases, the Qualified Transmission Project Sponsor's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available to the Qualified Transmission Project Sponsor as part of its response to the request for proposal. The Qualified Transmission Project Sponsor is not required to procure agreements with the PTO for implementation of such upgrades as the PTO is required to implement the upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process.

A PTO or PTOs identified by the ISO as the Backstop Transmission Solution provider(s) shall submit an individual or joint Phase One Proposal (if more than one PTO is identified) as a Backstop Transmission Solution to comprehensively address all of the needs identified in the request for proposal that would be solved by a project located within or connected to its/their existing electric system, and which it/they would therefore have an obligation to build under Schedule 3.09(a) of the TOA. Such PTOs may recover the costs of preparing the Backstop Transmission Solution in accordance with the mechanisms reflected in the OATT and the terms of the TOA.

A member of the Planning Advisory Committee that is not a Qualified Transmission Project Sponsor but would like the ISO to consider a Phase One Proposal reflecting its concept for a project in response to a request for proposal (that is, a project that is "unsponsored") must, before

the deadline for the submission of Phase One Proposals, identify a Qualified Transmission Project Sponsor willing to submit a corresponding Phase One Proposal and Phase Two Solution (and to develop and construct the project, if selected in the competitive solution process) in order for the unsponsored project to be submitted in response to an ISO solicitation in Phase One. Upon request by the pertinent Planning Advisory Committee member for assistance in identifying a sponsor, the ISO shall post on its website and distribute to the Planning Advisory Committee a notice that solicits expressions of interest by Qualified Transmission Project Sponsors for sponsorship of the member's conceptual project. All expressions of interest shall include a detailed explanation of why the Qualified Transmission Project Sponsor is best qualified to construct, own and operate the unsponsored project. If only one Qualified Transmission Project Sponsor expresses interest, the ISO shall designate it as the Qualified Transmission Project Sponsor. If more than one Qualified Transmission Project Sponsor expresses interest, the Planning Advisory Committee member shall select the Qualified Transmission Project Sponsor. In either case, the designated Qualified Transmission Project Sponsor shall thereafter comply with the requirements of this Attachment K and the ISO Tariff with respect to the project. If no Qualified Transmission Project Sponsor expresses interest, the unsponsored project may not be submitted as a Phase One Proposal.

**(b) Use and Control of Right of Way**

Neither the submission of a project by a Qualified Transmission Project Sponsor nor the selection by the ISO of a project submitted by a Qualified Transmission Project Sponsor for inclusion in the RSP Project List shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights, that granted the right-of-way. Nothing in the processes described in this Attachment K requires a PTO to relinquish any of its rights-of-way in order to permit a Qualified Transmission Project Sponsor to develop, construct or own a project.

**(c) Information Required for Phase One Proposals; Study Deposit; Timing**

**Phase One Proposals shall provide the following information:**

- (i) a detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed route for the solution and technical details of the project, such as interconnection into the existing transmission system;
- (ii) a detailed explanation of the identified needs that are addressed, how the proposed solution addresses those identified needs, a description of those needs which have not been addressed, and a description of the impact of the Phase One Proposal on those needs which have not been addressed;
- (iii) the proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution;
- (iv) right, title, and interest in rights of way, substations, and other property or facilities, if any, that would contribute to the proposed solution or the means and timeframe by which such would be obtained; and
- (v) the estimated installed costs of the proposed solution, including a high-level itemization of the components of the cost estimate and any cost containment or cost cap measures.

With each proposal, the submitting Qualified Transmission Project Sponsor must include payment of a \$100,000 study deposit per submitted Phase One Proposal to support the cost of Phase One Proposal and Phase Two Solution study work by the ISO. The study deposit of \$100,000 shall be applied towards the costs incurred by the ISO associated with the study of the Phase One Proposal and Phase Two Solution.

Phase One Proposals must be submitted by the deadline specified in the public posting by the ISO of the request for proposal described in Section 4.3(a) of this Attachment, which shall not be less than 60 days from the posting date of the request for proposal. The ISO may reject submittals which are insufficient or not adequately supported.

**(d) LSP Coordination**

Qualified Transmission Project Sponsors of Phase One Proposals shall also identify any LSP plans that require coordination with their Phase One Proposals.

**(e) Review of Phase One Proposals by ISO**

If any identified need is only solved by the Backstop Transmission Solution, the ISO shall proceed under Section 4.2 of this Attachment, rather than pursuant to the procedures set forth in the remainder of this Section 4.3.

If all of the identified needs are solved by more than one Phase One Proposal, the ISO shall perform a review of each proposal to determine whether the proposed solution:

- (i) provides sufficient data and that the data is of sufficient quality to satisfy Section 4.3(c) of this Attachment;
- (ii) satisfies one or more of the needs as identified in Section 4.3(c)(ii);
- (iii) is technically practicable and indicates possession of, or an approach to acquiring, the necessary rights of way, property and facilities that will make the proposal reasonably feasible in the required timeframe; and
- (iv) is eligible to be constructed only by an existing PTO in accordance with Schedule 3.09(a) of the TOA because the proposed solution is an upgrade to existing PTO facilities, or because the costs of the proposed solution are not eligible for regional cost allocation under the OATT and will be allocated only to the local customers of a PTO.

**(f) Proposal Deficiencies; Further Information**

If the ISO identifies any minor deficiencies in meeting the requirements of Section 4.3(e) in the information provided in connection with a proposed Phase One Proposal, the ISO will notify the submitting Phase One Proposal Qualified Transmission Project Sponsor and provide an opportunity for the sponsor to cure the deficiencies within the timeframe specified by the ISO. Upon request, Qualified Transmission Project Sponsors of Phase One Proposals shall provide the ISO with additional information reasonably necessary for the ISO's evaluation of the proposed

Phase One Proposals. This identification and notification will occur prior to the publication by the ISO of any Phase One Proposals. In providing information under this subsection (f), or in Phase Two Solutions, the Qualified Transmission Project Sponsor may not modify its project materially or submit a new project, but instead may clarify its Phase One Proposal. Phase Two Solutions reflecting a material modification to a Phase One Proposal or representing a new project will be rejected.

**(g) Listing of Qualifying Phase One Proposals or Groups of Phase One Proposals**

The ISO will provide the Planning Advisory Committee with, and post on the ISO's website, a listing of Phase One Proposals that meet the criteria of Section 4.3(e). The listing will contain Phase One Proposals, either individually or as a group, that solve all of the identified needs. A meeting of the Planning Advisory Committee will be held thereafter in order to solicit stakeholder input on the listing, and the listed proposals. The ISO with input from the Planning Advisory Committee may exclude Phase One Proposals, from the list, and from consideration in Phase Two Solutions, based on a determination that the Phase One Proposal is not competitive with other Phase One Proposals, that have been submitted in terms of cost, electrical performance, future system expandability, or feasibility. Information on Phase One Proposals containing CEII will be posted on the ISO's protected website consistent with Section 2.4(d) of this Attachment. The ISO may amend its listing based on stakeholder input. The ISO shall post on its website an explanation of why it has determined to exclude a Phase One Proposal from consideration in the Phase Two Solution process.

**(h) Information Required for Phase Two Solutions; Identification and Reporting of Preliminary Preferred Phase Two Solution**

Qualified Transmission Project Sponsors of Phase One Proposals reflected on the final listing developed pursuant to Section 4.3(g) of this Attachment shall provide the following information in their proposed Phase Two Solutions:

- (i) updates of the information provided in Phase One Proposals, or a certification that the information remains current and correct;
- (ii) list of required major Federal, State and local permits;



- (iii) description of construction sequencing, a conceptual plan for the anticipated transmission and generation outages necessary to construct the Phase Two Solution and their respective durations, and possible constraints;
- (iv) project schedule, with additional detail compared with Phase One Proposals, as specified by the ISO;
- (v) detailed cost component itemization and life-cycle cost including any clarifications to cost containment or cost cap measures that were not included as part of the Phase One Proposal;
- (vi) description of the financing being used;
- (vii) design and equipment standards to be used;
- (viii) description of the authority the Qualified Transmission Project Sponsor(s) has to acquire necessary rights of way;
- (ix) experience of the Qualified Transmission Project Sponsor(s) in acquiring rights of way;
- (x) status of acquisition of right, title, and interest in rights of way, substations, and other property or facilities, if any, that are necessary for the proposed Phase Two Solution;
- (xi) detailed explanation of project feasibility and potential constraints and challenges;
- (xii) description of the means by which the Qualified Transmission Project Sponsor(s) proposes to satisfy legal or regulatory requirements for siting, constructing, owning and operating transmission projects; and
- (xiii) detailed explanation of potential future expandability.

Phase Two Solutions must be submitted to the ISO by the deadline specified in the posting of the final listing (following stakeholder input) of Phase One Proposals described in Section 4.3(g). The deadline for submittal of Phase Two Solutions shall not be less than 60 days from the posting date of the final listing. The ISO may reject Phase Two Solution submittals which are insufficient or not adequately supported.

The ISO will identify the Phase Two Solution, individually or as a group, that offers the best combination of electrical performance, cost, future system expandability and feasibility to comprehensively address all of the needs in the required timeframe as the preliminary preferred Phase Two Solution in response to each request for proposal. The ISO will report the preliminary preferred Phase Two Solution, together with explanatory materials, to the Planning Advisory Committee and seek stakeholder input on the preliminary preferred Phase Two Solution.

The ISO will consider several factors during the evaluation process for identification of the preliminarily preferred Phase Two Solution. These factors may include, but are not limited to, the following which are listed in no particular order:

- Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
- System performance;
- Cost cap or cost containment provisions;
- In-service date of the project or portion(s) thereof;
- Project constructability;
- Generation and transmission facility outages required during construction;
- Extreme contingency performance;
- Operational impacts;
- Incremental costs for potential resource retirements;
- Interface impacts;
- Future expandability;
- Consistency with Good Utility Practice;
- Potential siting/permitting issues or delays;
- Loss savings;

- Replacement of aging infrastructure;
- Environmental impact;
- Design standards;
- Impact on NPCC Bulk Power System classification; and
- Qualified Transmission Project Sponsor(s) capabilities.

**(i) Reimbursement of Phase Two Solution Costs; Collection and Refund of ISO Study Costs**

Qualified Transmission Project Sponsors whose Phase One Proposals are listed pursuant to Section 4.3(g) for review as Phase Two Solutions shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff (and, as applicable, the TOA and NTDOA), all prudently incurred costs associated with developing a Phase Two Solution. PTOs shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff, all prudently incurred study costs and costs associated with developing any upgrades or modifications to such PTOs' existing facilities necessary to facilitate the development of a listed Phase One Proposal proposed by any other Qualified Transmission Project Sponsor.

Any difference between a Qualified Transmission Project Sponsor's study deposit and the actual cost of the Phase One Proposal and Phase Two Solution studies shall be paid by or refunded to the Qualified Transmission Project Sponsor, as appropriate, with interest calculated in accordance with Section 35.19a(a)(2) of the FERC regulations. Any refund payment shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any invoice to collect funds in addition to the deposit shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any disputes arising from the study process shall be addressed under the dispute resolution process specified in Section I.6 of the ISO Tariff.

**(j) Selection of the Preferred Phase Two Solution**

Following receipt of stakeholder input, the ISO will identify the preferred Phase Two Solution, individually or as a group, (with an overview of why the solution is preferred) by a posting on its website. The ISO's identification will select the project that offers the best combination of electrical performance, cost, future system expandability and feasibility to meet the need in the required timeframe. The ISO will also notify the Qualified Transmission Project Sponsor(s) that

proposed the preferred Phase Two Solution that its project has been selected for development. The preferred Phase Two Solution may include an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases the ISO will notify the PTO that have upgrades required by the preferred Phase Two Solution to proceed in accordance with Schedule 3.09(a) of the Transmission Operating Agreement. Once the ISO has identified the preferred Phase Two Solution, any remaining Phase Two Solutions, along with the Backstop Transmission Solution, must stop all development. The ISO will include the project as a Reliability Transmission Upgrade or Market Efficiency Transmission Upgrade, as appropriate, in the RSP and/or its Project List, as it is updated from time to time in accordance with this Attachment. Where external impacts of regional projects are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP. Costs associated with such impacts will be addressed as set forth in Schedule 15.

**(k) Execution of Selected Qualified Transmission Project Sponsor Agreement**

Within 30 days of receiving notification pursuant to Section 4.3(j) of this Attachment, the Qualified Transmission Project Sponsor shall submit to the ISO its acceptance of responsibility to proceed with the preferred Phase Two Solution by execution of a Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Within 30 days of receiving notification pursuant to Section 4.3(j) of this Attachment, each Qualified Transmission Project Sponsor that is part of the joint proposal shall submit to the ISO its acceptance of responsibility to proceed with the preferred Phase Two Solution by execution of a Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Any cost cap or cost containment provisions shall be included in each Selected Qualified Transmission Project Sponsor Agreement.

**(l) Failure to Proceed**

If the ISO finds, after consultation with a PTO Qualified Transmission Project Sponsor(s), that one or more of the Qualified Transmission Project Sponsors is failing to pursue approvals or construction in a reasonably diligent fashion, the ISO will notify all Qualified Transmission Project Sponsors that one or more of the Qualified Transmission Project Sponsors is failing to pursue approvals or construction in a reasonably diligent fashion. The Qualified Transmission

Project Sponsor(s) that is failing to pursue approvals or construction in a reasonably diligent fashion will have 60 days from the ISO's notification to reassign a portion or all of the preferred Phase Two Solution to another Qualified Transmission Project Sponsor in accordance with Section 8 of the Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). In the event that such reassignment does not occur within 60 days, the ISO shall require the applicable PTO(s) to execute the Selected Qualified Transmission Project Sponsor Agreement and implement the Backstop Transmission Solution pursuant to Schedule 3.09(a) of the Transmission Operating Agreement. In such cases the ISO shall prepare a report explaining why it has reassigned the project. If the Qualified Transmission Project Sponsor that is failing or unable to proceed is a PTO, the report shall be consistent with the provisions of Section 1.1(e) of Schedule 3.09(a) of the Transmission Operating Agreement, including the ISO's proposed course of action. If prepared with respect to a Qualified Transmission Project Sponsor that is not a PTO, the report shall include a report from that sponsor. The ISO shall file its report (whether with respect to a PTO or non-PTO Qualified Transmission Project Sponsor) with the Commission.

**(m) Cancellation of a Request for Proposal**

The ISO may cancel a request for proposal at any time. Such cancellation may be due to new or different assumptions which may change or eliminate the identified needs. Any costs associated with solution development shall be recovered pursuant to Sections 3.6(c), 4.3(a) and 4.3(i) of this Attachment.

**4A. Public Policy Transmission Studies; Public Policy Transmission Upgrades**

**4A.1 NESCOE Requests for Public Policy Transmission Studies**

No less often than every three years, by January 15 of that year, the ISO will post a notice indicating that members of the Planning Advisory Committee may, no later than 45 days after the posting of the notice: (i) provide NESCOE, via the process described below, with input regarding state and federal Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and regarding particular transmission needs driven by those Public Policy Requirements, and (ii) provide the ISO with input regarding local (e.g., municipal and county) Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and regarding particular transmission needs driven by those Public Policy Requirements. A meeting of the Planning Advisory Committee may

be held for this purpose. Members of the Planning Advisory Committee shall direct all such input related to state, federal, and local Public Policy Requirements that drive transmission needs to the ISO and the ISO will post such input on the ISO's website. By no later than May 1 of that year, NESCOE may submit to the ISO in writing a request for a new Public Policy Transmission Study, or an update of a previously conducted study. The request will identify the Public Policy Requirements identified as driving transmission needs relating to the New England Transmission System, and may identify particular NESCOE-identified public policy-related transmission needs as well. Along with any such request, NESCOE will provide the ISO with a written explanation of which transmission needs driven by state or federal Public Policy Requirements the ISO will evaluate for potential solutions in the regional planning process, including why other suggested transmission needs will not be evaluated. The ISO will post the NESCOE request and explanation on the ISO's website. If NESCOE does not provide that listing of identified transmission needs (which may consist of a NESCOE statement of its determination that no transmission needs are driven by state or federal Public Policy Requirements identified during the stakeholder process) and that explanation (which may consist of a NESCOE explanation of why no transmission needs are driven by state or federal Public Policy Requirements identified during the stakeholder process), the ISO will note on its website that a NESCOE listing and explanation have not been provided. In that circumstance, the ISO will determine subsequently (after opportunity for Planning Advisory Committee input), and post on its website an explanation of, which transmission needs driven by state or federal Public Policy Requirements the ISO will evaluate in the regional planning process, including why other suggested transmission needs will not be evaluated.

#### **4A.1.1 Study of Federal Public Policy Requirements Not Identified by NESCOE; Local Public Policy Requirements**

If a stakeholder believes that a federal Public Policy Requirement that may drive transmission needs relating to the New England Transmission System has not been appropriately addressed by NESCOE, it may file with the ISO, no later than 15 days after the posting of NESCOE's explanation as described in Section 4A.1 of this Attachment, a written request that explains the stakeholder's reasoning and that seeks reconsideration by the ISO of NESCOE's position regarding that requirement. The ISO will post the stakeholder's written request on the ISO's website. Where the ISO agrees with a stated stakeholder position, or on its own finding, the ISO

may perform an evaluation under Sections 4A.2 through 4A.4 of this Attachment of a federal Public Policy Requirement not otherwise identified by NESCOE. The ISO will post on its website an explanation of those transmission needs driven by federal Public Policy Requirements not identified by NESCOE that will be evaluated for potential transmission solutions in the regional system planning process, and why other suggested transmission needs driven by federal Public Policy Requirements not identified by NESCOE will not be evaluated. In addition, the ISO will post on its website an explanation of those transmission needs driven by local Public Policy Requirements that will be evaluated for potential transmission solutions in the regional system planning process, and why other suggested transmission needs driven by local Public Policy Requirements will not be evaluated.

#### **4A.2 Preparation for Conduct of Public Policy Transmission Studies; Stakeholder Input**

Upon receipt of the NESCOE request, or as the result of the ISO's consideration of a federal or local Public Policy Requirement pursuant to Section 4A.1.1, the ISO will prepare and post on its website a proposed scope for the Public Policy Transmission Study, and associated parameters and assumptions (including resource assumptions), and provide the foregoing to the Planning Advisory Committee by no later than September 1 of the request year. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit stakeholder input for consideration by the ISO on the study's scope, parameters and assumptions.

#### **4A.3 Public Policy Transmission Studies**

##### **(a) Conduct of Public Policy Transmission Studies; Stakeholder Input**

With input from Planning Advisory Committee and potentially impacted PTOs, the ISO will perform the initial phase of the Public Policy Transmission Study to develop a rough estimate of the costs and benefits of high-level concepts that could meet transmission needs driven by Public Policy Requirements. The study's results will be posted on the ISO's website, and a meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input on the results of the initial phase of the study, and the scope, parameters and assumptions (including resource assumptions) for any follow-on phase of the study. The ISO may – as a follow-on phase of the Public Policy Transmission Study – perform more detailed analysis and engineering work on the high-level concepts.

**(b) Treatment of Market Solutions in Public Policy Transmission Studies**

The ISO shall reflect proposed market responses in the Public Policy Transmission Study.

Market responses may include, but are not limited to, resources (e.g., demand-side projects and distributed generation), Merchant Transmission Facilities and Elective Transmission Upgrades.

In performing Public Policy Transmission Studies, the ISO shall rely on certain resources to prevent the identification of transmission needs driven by Public Policy Requirements.

Specifically, the ISO shall incorporate in the Public Policy Transmission Study information regarding future resources, with the exception of imports across external tie lines, that have been proposed and (i) have cleared in a Forward Capacity Auction pursuant to Market Rule 1 of the ISO Tariff, (ii) have been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) have been forecast in the ISO's Forecast Report of Capacity, Energy, Loads and Transmission. The ISO shall also incorporate or update information regarding all existing resources, with the exception of imports across external tie lines, in Public Policy Transmission Studies. Imports across future or existing external tie lines will not be relied upon unless such imports (i) have a Capacity Supply Obligation corresponding to the year of study, (ii) have been selected in, and are contractually bound by, a state-sponsored request for proposals, (iii) have a financially binding obligation pursuant to a contract, or (iv) may be represented by a minimum flow based on HQ Interconnection Capability Credits. The ISO will model out-of-service all submitted Retirement De-List Bids, submitted Permanent De-List Bids, and demand bids that have cleared in a substitution auction, and may model out-of-service rejected-for-reliability Static De-List Bids and rejected-for-reliability Dynamic De-List Bids from the most recent Forward Capacity Auction. With respect to having been selected in, and being contractually bound by a state-sponsored request for proposals, or having a financially binding obligation pursuant to a contract, demonstration of such contracts is accomplished through submittal for ISO review of an order or other similar authorization from the appropriate state regulatory agency, along with a copy of the contract, that together demonstrate the contractual requirements. These documents may be submitted by: the Project Sponsor; the state regulatory agency authorizing the contract; a transmission company that is a counterparty to the contract; or by a third-party organization representing the interests of the New England states regarding energy related issues, such as NESCOE. The ISO shall incorporate information regarding a proposed Merchant Transmission



Facility or Elective Transmission Upgrade in a Public Policy Transmission Study at a time after the studies corresponding to the Merchant Transmission Facility or Elective Transmission Upgrade are completed (including receipt of approval under Section I.3.9 of the Tariff), and a commercial operation date has been ascertained, with the exception of Elective Transmission Upgrades that are proposed in conjunction with the interconnection of a resource, which shall be considered at the same time as the proposed resource is considered in the Public Policy Transmission Study.

#### **4A.4 Response to Public Policy Transmission Studies**

The results of the Public Policy Transmission Study will be provided to the Planning Advisory Committee and posted on the ISO's website, and a meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input for the ISO on those results, including any updates from the states on any methods by which they are satisfying their respective Public Policy Requirements included in the Public Policy Transmission Study. The ISO's costs of performing the Public Policy Transmission Study described in Section 4A.3 will be collected by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff. Any prudently incurred PTO costs for assistance requested by the ISO to support the Public Policy Transmission Study will be recovered by the applicable PTO(s) in accordance with Attachment F and Schedule 21 of the Tariff.

The ISO will evaluate the input from the Planning Advisory Committee and provide the results of the Public Policy Transmission Study to Qualified Transmission Project Sponsors for their use in preparing Stage One Proposals to develop, build and operate one or more projects consistent with the general design requirements identified by the ISO in the study.

#### **4A.5 Use and Control of Right of Way**

Neither the submission of a project by a Qualified Transmission Project Sponsor nor the selection by the ISO of a project submitted by a Qualified Transmission Project Sponsor for inclusion in the RSP Project List shall alter a PTO's use and control of an existing right of way, the retention, modification, or transfer of which remain subject to the relevant law or regulation, including property or contractual rights, that granted the right-of-way. Nothing in the processes described in

this Attachment K requires a PTO to relinquish any of its rights-of-way in order to permit a Qualified Transmission Project Sponsor to develop, construct or own a project.

#### **4A.6 Stage One Proposals**

##### **(a) Information Required for Stage One Proposals**

The ISO will publicly post on its website a request for proposal inviting, for each high-level general project concept identified by the ISO pursuant to Section 4A.3(a) above, Qualified Transmission Project Sponsors to submit (by the deadline specified in the request for proposal, which shall be not less than 60 days from the date of posting the request for proposal) an individual or joint Stage One Proposal. In the case where a joint Stage One Proposal is submitted, all parties must be Qualified Transmission Project Sponsors. The following information must be provided as part of the Stage one Proposal:

- (i) a detailed description of the proposed solution, in the manner specified by the ISO, including an identification of the proposed route for the solution and technical details of the project, such as interconnection into the existing transmission system;
- (ii) a detailed explanation of how the proposed solution addresses the identified need;
- (iii) the proposed schedule, including key high-level milestones, for development, siting, procurement of real estate rights, permitting, construction and completion of the proposed solution;
- (iv) right, title, and interest in rights of way, substations, and other property or facilities, if any, that would contribute to the proposed solution or the means and timeframe by which such would be obtained; and
- (v) the estimated installed costs of the proposed solution, including a high-level itemization of the components of the cost estimate, and any cost containment or cost cap measures.

A Qualified Transmission Project Sponsor may submit a proposed solution that includes an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases, the Qualified Transmission Project Sponsor's proposed solution relating to the upgrade(s) of an existing transmission system element(s) must provide all data available to the Qualified Transmission Project Sponsor as part of its response to the request for proposal. The Qualified

Transmission Project Sponsor is not required to procure agreements with the PTO for implementation of such upgrades as the PTO is required to implement the upgrade(s) in accordance with Schedule 3.09(a) of the Transmission Operating Agreement if the proposed solution is selected through the competitive process.

A member of the Planning Advisory Committee that is not a Qualified Transmission Project Sponsor but would like the ISO to consider a Stage One Proposal reflecting its concept for a project in response to a request for proposal (that is, a project that is “unsponsored”) must identify a Qualified Transmission Project Sponsor willing to submit a corresponding Stage One Proposal and Stage Two Solution (and to develop and construct the project, if selected in the competitive solution process) in order for the unsponsored project to be submitted in response to an ISO solicitation in Stage One Proposal. Upon request of the pertinent Planning Advisory Committee member for assistance in identifying a sponsor, the ISO shall post on its website and distribute to the Planning Advisory Committee a notice that solicits expressions of interest by Qualified Transmission Project Sponsors for sponsorship of the member’s conceptual project. All expressions of interest shall include a detailed explanation of why the Qualified Transmission Project Sponsor is best qualified to construct, own and operate the unsponsored project. If only one Qualified Transmission Project Sponsor expresses interest, the ISO shall designate it as the Qualified Transmission Project Sponsor. If more than one Qualified Transmission Project Sponsor expresses interest, the Planning Advisory Committee member shall select the Qualified Transmission Project Sponsor. In either case, the designated Qualified Transmission Project Sponsor shall thereafter comply with the requirements of this Attachment K and the ISO Tariff with respect to the project. If no Qualified Transmission Project Sponsor expresses interest, the unsponsored project may not be submitted as a Stage One Proposal.

With each proposal, the submitting Qualified Transmission Project Sponsor must include payment of a \$100,000 study deposit per submitted project to support the cost of Stage One Proposal and Stage Two Solution study work by the ISO. The study deposit of \$100,000 shall be applied towards the costs incurred by the ISO associated with the study of the Stage One Proposal and Stage Two Solution.

**(b) LSP Coordination**

Qualified Transmission Project Sponsors of Stage One Proposals shall also identify any LSP plans that require coordination with their Stage One Proposals.

**(c) Review of Stage One Proposals by ISO**

Upon receipt of Stage One Proposals, the ISO shall perform a review of each proposal to determine whether the proposed solution:

- (i) provides sufficient data and that the data is of sufficient quality to satisfy Section 4A.6(a);
- (ii) satisfies the needs driven by Public Policy Requirements identified in the request for proposal, as reflected in the Public Policy Transmission Study;
- (iii) is technically practicable and indicates possession of, or an approach to acquiring, the necessary rights of way, property and facilities that will make the proposal reasonably feasible in the required timeframe; and;
- (iv) is eligible to be constructed only by an existing PTO in accordance with Schedule 3.09(a) of the TOA because the proposed solution is an upgrade to existing PTO facilities or because the costs of the proposed solution are not eligible for regional cost allocation under the OATT and will be allocated only to the local customers of a PTO.

**(d) Proposal Deficiencies; Further Information**

If the ISO identifies any deficiencies (compared with the requirements of Section 4A.6(a)) in the information provided in connection with a proposed Stage One Proposal, the ISO will notify the Stage One Proposal Qualified Transmission Project Sponsor and provide an opportunity for the Qualified Transmission Project Sponsor to cure the deficiencies within the timeframe specified by the ISO. Upon request, Qualified Transmission Project Sponsors of Stage One Proposals shall provide the ISO with additional information reasonably necessary for the ISO's evaluation of the proposed solutions. This identification and notification will occur prior to the publication by the ISO of any Stage One Proposals. In providing information under this subsection (d), or in Stage Two Solutions, the Qualified Transmission Project Sponsor may not modify its project materially or submit a new project, but instead may clarify its project. Stage Two Solutions reflecting a material modification to a Stage One Proposal or representing a new project will be rejected.

**(e) List of Qualifying Stage One Proposals**

The ISO will provide the Planning Advisory Committee with, and post on the ISO's website, a list of Stage One Proposals that meet the criteria of Section 4A.6(c). A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input for the ISO on that list. The ISO shall also indicate whether any of the Stage One Proposals may also satisfy identified reliability needs of the system. The ISO with input from the Planning Advisory Committee may exclude Stage One Proposals from the list, and from consideration in Stage Two Solutions, based on a determination that the Stage One Proposal is not competitive with other Stage One Proposals that have been submitted in terms of cost, electrical performance, future system expandability, or feasibility. Information on Stage One Proposals containing CEII will be posted on the ISO's protected website consistent with Section 2.4(d) of this Attachment. The ISO may amend its listing based on stakeholder input.

**4A.7 Reimbursement of Stage One Proposal and Stage Two Solution Costs; Collection and Refund of ISO Study Costs**

Qualified Transmission Project Sponsors that are requested by NESCOE in writing or by one or more states' governors or regulatory authorities directly to submit a Stage One Proposal shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff and the TOA, their prudently incurred costs from the Regional Network Load of the states identified by NESCOE in the written communication as having made the request or from the Regional Network Load of the states that made the request directly. Stage One Proposal costs shall otherwise not be subject to recovery under the ISO Tariff.

Qualified Transmission Project Sponsors whose projects are listed by the ISO pursuant to Section 4A.6(e) shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff and, as applicable, the TOA and NTDOA, all prudently incurred costs associated with developing a Stage Two Solution. PTOs shall be entitled to recover, pursuant to rates and appropriate financial arrangements set forth in the Tariff, all prudently incurred study costs and costs associated with developing any upgrades or modifications to such PTOs' existing facilities necessary to facilitate the development of a listed Stage Two Solution proposed by any other Qualified Transmission Project Sponsor.

Any difference between a Qualified Transmission Project Sponsor's study deposit and the actual cost of the Stage One Proposal and Stage Two Solutions studies shall be paid by or refunded to the Qualified Transmission Project Sponsor, as appropriate, with interest calculated in accordance with Section 35.19a(a)(2) of the FERC regulations. Any refund payment shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any invoice to collect funds in addition to the deposit shall be accompanied by a detailed and itemized accounting of the actual study costs incurred. Any disputes arising from the study process shall be addressed under the dispute resolution process specified in Section I.6 of the Tariff.

#### **4A.8 Information Required for Stage Two Solutions; Identification and Reporting of Preliminary Preferred Stage Two Solution**

Qualified Transmission Project Sponsors of Stage One Proposals listed pursuant to Section 4A.6(e) of this Attachment shall provide the following information in their proposed Stage Two Solutions:

- (i) updates of the information provided in Stage One Proposals, or a certification that the information remains current and correct;
- (ii) list of required major Federal, State and local permits;
- (iii) description of construction sequencing, a conceptual plan for the anticipated transmission and generation outages necessary to construct the Stage Two Solution and their respective durations, and possible constraints;
- (iv) project schedule, with additional detail compared with Stage One Proposals, as specified by the ISO;
- (v) detailed cost component itemization and life-cycle cost including any clarifications to cost containment or cost cap measures that were not included as part of the Stage One Proposal;
- (vi) description of the financing being used;

- (vii) design and equipment standards to be used;
- (viii) description of the authority the Qualified Transmission Project Sponsor(s) has to acquire necessary rights of way;
- (ix) experience of the Qualified Transmission Project Sponsor(s) in acquiring rights of way;
- (x) status of acquisition of right, title, and interest in rights of way, substations, and other property or facilities, if any, that are necessary for the proposed Stage Two Solution;
- (xi) detailed explanation of project feasibility and potential constraints and challenges;
- (xii) description of the means by which the Qualified Transmission Project Sponsor(s) proposes to satisfy legal or regulatory requirements for siting, constructing, owning and operating transmission projects; and
- (xiii) detailed explanation of potential future expandability.

Stage Two Solutions must be submitted to the ISO by the deadline specified in the posting of the final listing (following stakeholder input) of Stage One Proposals described in Section 4A.6(e). The deadline for submittal of Stage Two Solutions shall not be less than 60 days from the posting date of the final listing. The ISO may reject Stage Two Solution submittals which are insufficient or not adequately supported.

The ISO will consider several factors during the evaluation process for identification of the preliminarily preferred Stage Two Solution. These factors may include, but are not limited to, the following which are listed in no particular order:

- Life-cycle cost, including all costs associated with right of way acquisition, easements, and associated real estate;
- System performance;
- Cost cap or cost containment provisions;

- In-service date of the project or portion(s) thereof;
- Project constructability;
- Generation and transmission facility outages required during construction;
- Extreme contingency performance;
- Operational impacts;
- Incremental costs for potential resource retirements;
- Interface impacts;
- Future expandability;
- Consistency with Good Utility Practice;
- Potential siting/permitting issues or delays;
- Loss savings;
- Replacement of aging infrastructure;
- Environmental impact;
- Design standards;
- Impact on NPCC Bulk Power System classification; and
- Qualified Transmission Project Sponsor(s) capabilities

The ISO will report the preliminary preferred Stage Two Solution(s), along with its views as to whether the preliminary preferred solution(s) also satisfies identified reliability needs of the system, to the Planning Advisory Committee and seek stakeholder input on the preliminary preferred Stage Two Solution(s).

#### **4A.9 Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List; Milestone Schedules; Removal from RSP Project List**

##### **(a) Inclusion of Public Policy Transmission Upgrades in the Regional System Plan and RSP Project List**

Following receipt of stakeholder input, the ISO will identify the preferred Stage Two Solution (with an overview of why the solution is preferred) by a posting on its website. The ISO's identification will select the Stage Two Solution that best addresses the identified Public Policy Requirement while utilizing the best combination of electrical



performance, cost, future system expandability and feasibility to meet the need in the required timeframe. The ISO will also notify the Qualified Transmission Project Sponsor that proposed the preferred Stage Two Solution that its project has been selected for development, and include the project as a Public Policy Transmission Upgrade in the Regional System Plan and RSP Project List, as it is updated from time to time in accordance with this Attachment. The preferred Stage Two Solution may include an upgrade(s) located on or connected to a PTO's existing transmission system where the Qualified Transmission Project Sponsor is not the PTO for the existing system element(s). In such cases the ISO will notify the PTO that have upgrades required by the preferred Stage Two Solution to proceed in accordance with Schedule 3.09(a) of the Transmission Operating Agreement. Once the ISO has identified the preferred Stage Two Solution, any remaining Stage Two Solutions must stop all development. Where external impacts of regional Public Policy Transmission Upgrades are identified through coordination by the ISO with neighboring entities, those impacts will be identified in the RSP. Costs associated with such impacts will be addressed as set forth in Schedule 15.

**(b) Execution of Selected Qualified Transmission Project Sponsor Agreement**

Within 30 days of its receiving notification pursuant to Section 4A.9(a) of this Attachment, the Qualified Transmission Project Sponsor shall submit to the ISO its acceptance of responsibility to proceed with the preferred Stage Two Solution by execution of the Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Within 30 days of receiving notification pursuant to Section 4A.9(a) of this Attachment, each Qualified Transmission Project Sponsor that is part of the joint proposal shall submit to the ISO its acceptance of responsibility to proceed with the preferred Stage Two Solution by execution of a Selected Qualified Transmission Project Sponsor Agreement (Attachment P to the OATT). Any cost cap or cost containment provisions shall be included each Selected Qualified Transmission Project Sponsor Agreement.

**(c) Failure to Proceed**

If the ISO finds, after consultation with a Qualified Transmission Project Sponsor, that the sponsor is failing to pursue approvals or construction in a reasonably diligent fashion,

or that one or more of the Qualified Transmission Project Sponsors is unable to proceed with the project due to forces beyond its reasonable control, the ISO shall, after consultation with the Planning Advisory Committee, prepare a report, including a proposed course of action. If the Qualified Transmission Project Sponsor that is failing or unable to proceed is a PTO, the ISO shall, after consultation with the Planning Advisory Committee, prepare a report consistent with the provisions of Section 1.1(e) of Schedule 3.09(a) of the Transmission Operating Agreement, including the ISO's proposed course of action. The proposed course of action may include, for example, a consideration and selection of another Stage Two Proposal relating to the pertinent Public Policy Requirement, or the re-solicitation of Stage One Proposals to meet the pertinent Public Policy Requirement. If prepared with respect to a Qualified Transmission Project Sponsor that is not a PTO, the report shall include a report from that sponsor. The ISO shall file its report (whether with respect to a PTO or a non-PTO Qualified Transmission Project Sponsor) with the Commission.

#### **4A.10 Cancellation of a Request for Proposal**

The ISO may cancel a request for proposal at any time. Such cancellation may be due to new or different assumptions which may change or eliminate the identified needs. Any costs associated with solutions development shall be recovered pursuant to Sections 3.6(c) and 4A.7 of this Attachment.

#### **4A.11 Local Public Policy Transmission Upgrades**

The costs of Local Public Policy Transmission Upgrade(s) that are required in connection with the construction of a Public Policy Transmission Upgrade approved for inclusion in the Regional System Plan in accordance with Section 4A.9 shall be allocated in accordance with Schedule 21 of the ISO OATT.

### **4B. Qualified Transmission Project Sponsors**

#### **4B.1 Evaluation of Applications**

The ISO will evaluate applications submitted by an entity that seeks to qualify as a sponsor of a proposed Reliability Transmission Upgrade, Market Efficiency Transmission Upgrade or Public Policy Transmission Upgrade.

#### **4B.2 Information To Be Submitted**

The application to be submitted to the ISO by an entity desiring to be a Qualified Transmission Project Sponsor will include the following information:

- (i) the current and expected capabilities of the applicant to finance and construct a Reliability Transmission Upgrade, Market Efficiency Transmission Upgrade or Public Policy Transmission Upgrade and operate and maintain it for the life of the project;
- (ii) the financial resources of the applicant;
- (iii) the technical and engineering qualifications and experience of the applicant;
- (iv) if applicable, the previous record of the applicant regarding construction and maintenance of transmission facilities;
- (v) demonstrated capability of the applicant to adhere to construction, maintenance and operating Good Utility Practices, including the capability to respond to outages;
- (vi) the ability of the applicant to comply with all applicable reliability standards; and
- (vii) demonstrated ability of the applicant to meet development and completion schedules.

#### **4B.3 Review of Qualifications**

The ISO shall review each application for completeness. The ISO will notify each applicant within 30 calendar days of receipt of such application whether the application is complete, or identify any deficiencies in provision of the information required by Section 4B.2 of this Attachment. An applicant notified of deficiencies must provide any remedial information within 30 calendar days of the receipt of such notice. Thereafter, the ISO will determine whether the applicant is physically, technically, legally, and financially capable of constructing a Reliability Transmission Upgrade, Market Efficiency Transmission Upgrade or Public Policy Transmission Upgrade in a timely and competent manner, and operating and maintaining the facilities consistent with Good Utility Practice and applicable reliability criteria for the life of the project, and use its best efforts to inform the applicant within 90 days from the date on which it has a completed application on file with the ISO whether it has met all of these criteria. A PTO determined by the ISO to meet all of these criteria will be deemed a Qualified Transmission

Project Sponsor. A non-PTO entity determined by the ISO to meet all of these criteria will, upon its execution of the Non-incumbent Transmission Developer Operating Agreement (in the form specified in Attachment O of the OATT) and the Market Participant Service Agreement, be deemed a Qualified Transmission Project Sponsor.

#### **4B.4 List of Qualified Transmission Project Sponsors**

Qualified Transmission Project Sponsors are listed in Appendix 3 of this Attachment K.

#### **4B.5 Annual Certification**

Each Qualified Transmission Project Sponsor shall submit to the ISO annually a certification that the information initially submitted in response to Section 4B.2 of this Attachment K has not changed adversely in a material fashion, or (if a material adverse change has occurred in the intervening year) submit instead a new application for qualification as a project sponsor. In the latter case, the entity shall not be a Qualified Transmission Project Sponsor unless and until the ISO approves its new application.

### **5. Supply of Information and Data Required for Regional System Planning**

The Transmission Owners, Generator Owners, Transmission Customers, Market Participants and other entities requesting transmission or interconnection service or proposing the integration of facilities to PTF in the New England Transmission System or alternatives to such facilities, and stakeholders requesting a Needs Assessment pursuant to Section 4.1 of this Attachment, shall supply, as required by the Tariff, the Participants Agreement, MPSAs, applicable transmission operating agreements, and/or other existing agreements, protocols and procedures, or upon request by the ISO, and subject to required CEII and confidentiality protections as specified in Section 2.4 of this Attachment, any information (including cost estimates) and data that is reasonably required to prepare an RSP or perform a Needs Assessment, Solutions Study, or any other study performed under this Attachment K.

### **6. Regional, Local and Interregional Coordination**

#### **6.1 Regional Coordination**

The ISO shall conduct the regional system planning process for the PTF in coordination with the transmission-owning entities in, or other entities interconnected to, the New England Transmission System consistent with the rights and obligations defined in the ISO OATT, applicable transmission

operating agreements or protocols, and/or this Attachment. Pursuant to Section II.49 of this OATT and Sections 3.02, 3.05 and 3.09 of the TOA, the ISO has Operating Authority or control over all PTF and Non-PTF within the New England Control Area, which are utilized for the provision of transmission service under this OATT. The ISO also has Operating Authority or control over the United States portions of the HVDC ties to Quebec and over Merchant Transmission Facilities and Other Transmission Facilities, pursuant to this OATT or applicable transmission operating agreements or protocols. The ISO, however, is not responsible for the planning of the Non-PTF, OTF and MTF. As provided in Section 6.2 and Appendix 1 of this Attachment, the PTOs are responsible for the planning of the Non-PTF and coordinating such planning efforts with the ISO. Pursuant to the OATT and/or applicable transmission operating agreements or protocols, the transmission owners of OTF and MTF are required to participate in the ISO's regional system planning process and perform and/or support studies of the impacts of regional system projects on their respective facilities.

## **6.2 Local Coordination**

The regional system planning process shall be conducted and the RSP shall be developed in coordination with the local system plans of the PTOs. In accordance with the TOA and OATT provisions identified in Section 6.1 of this Attachment, the PTOs have responsibility for planning Non-PTF. The PTOs conduct planning of Non-PTF using the LSP process outlined in Section 2.5 and Appendix 1 of this Attachment, in coordination with the ISO, other entities interconnected with the New England Transmission System, Transmission Customers and stakeholders, and in accordance with the provisions in the TOA, the OATT and the Planning and Reliability Criteria. The openness and transparency of the LSP process is intended to be consistent with the regional system planning process.

## **6.3 Interregional Coordination**

The regional system planning process shall be conducted and the RSP shall be developed in coordination with the similar plans of the surrounding ISOs/RTOs and Control Areas pursuant to the Northeastern Planning Protocol and other agreements with neighboring systems (including entities that are not Parties to the Northeastern Planning Protocol) and NPCC.

**(a) Interregional Coordination and Cost Allocation Among ISO, New York Independent System Operator, Inc. ("NYISO") and PJM Interconnection, L.L.C. ("PJM") Under Order No. 1000**

Pursuant to Section 7 of the Northeastern Planning Protocol (which is posted on the web at [www.iso-ne.com/static-assets/documents/2015/07/northeastern\\_protocol\\_dmeast.doc](http://www.iso-ne.com/static-assets/documents/2015/07/northeastern_protocol_dmeast.doc), the Joint ISO/RTO Planning Committee (“JIPC”) reviews regional needs and solutions identified in the regional planning processes of the ISO, NYISO and PJM in order to identify, with input from the Interregional Planning Stakeholder Advisory Committee (“IPSAC”), the potential for Interregional Transmission Projects that could meet regional needs more efficiently or cost-effectively than regional transmission projects. All members of the Planning Advisory Committee shall be considered IPSAC members. The JIPC will coordinate studies deemed necessary to allow the effective consideration by the regions, in the same general timeframe, of a proposed Interregional Transmission Project in comparison to regional transmission solutions. Any stakeholder may propose in the New England planning process, for evaluation under Section 4.2, 4.3, or 4A (as applicable) of Attachment K, an Interregional Transmission Project (or project concept) that may be more efficient or cost-effective than a regional transmission solution. If a proposed Interregional Transmission Project is approved in each region in which the project is located, the corresponding New England regional transmission project(s) will be displaced in the circumstances described in Section 3.6(a) of this Attachment, and the costs of the Interregional Transmission Project will be allocated among the regions based on the formula provided in Schedule 15 of this OATT, or in accordance with another funding arrangement filed with and accepted by the Commission. The amount of the costs of an Interregional Transmission Project allocated as the responsibility of New England pursuant to the methodology referenced in Section 6.3(a) of this Attachment shall be allocated within New England as specified in Schedule 15 of the ISO OATT.

**(b) Other Interregional Assessments and Other Interregional Transmission Projects**

Interregional system assessments and/or interregional system expansion planning studies may be performed periodically by the ISO with Planning Authorities who are not parties to the Northeastern Planning Protocol, or with the JIPC pursuant to Section 6 of the Northeastern Planning Protocol, or both. The ISO shall convene periodic meetings of the Planning Advisory Committee (which may be combined with meetings of the IPSAC), to provide input and feedback to the ISO concerning such assessments and studies. To the extent that an Interregional Transmission Project is agreed to by ISO and by another region (not a Party to the Northeastern Planning Protocol) in which a portion of the project is located, the related cost allocation and

operating agreements will be filed with the Commission (and, as applicable, with Canadian jurisdictional agencies) in accordance with existing filing rights.

## **7. Procedures for Development and Approval of the RSP**

### **7.1 Initiation of RSP**

No less often than once every three years, the ISO shall initiate an effort to develop its RSP and solicit input on regional system needs for the RSP from the Planning Advisory Committee. The Planning Advisory Committee shall meet to perform its respective functions in connection with the preparation of the RSP, as specified in Section 2 of this Attachment. The ISO shall issue the periodic planning reports that support the RSP, such as Needs Assessments, as those reports are completed.

### **7.2 Draft RSP; Public Meeting**

The ISO shall provide a draft of the RSP to the Planning Advisory Committee and input from that Committee shall be received and considered in preparing and revising subsequent drafts. The ISO shall post the draft RSP and provide notice to the Planning Advisory Committee of a meeting to review the draft RSP as specified in Section 2.2 of this Attachment.

After the ISO has provided a draft of the RSP to the Planning Advisory Committee, the ISO shall issue a second draft of the RSP to be presented by the ISO staff to the ISO Board of Directors for approval. The draft RSP shall incorporate the results of any Needs Assessment, and corresponding Solutions Studies, performed since the last RSP was approved. A subcommittee of that Board shall hold a public meeting, at their discretion, to receive input directly and to discuss any proposed revisions to the RSP. The final recommended RSP shall be presented to the ISO Board of Directors and shall be acted on by the ISO Board of Directors within 60 days of receipt. The foregoing timeframes are subject to adjustment as determined by the ISO in coordination with the Planning Advisory Committee.

### **7.3 Action by the ISO Board of Directors on RSP; Request for Alternative Proposals**

#### **(a) Action by ISO Board of Directors on RSP**

The ISO Board of Directors may approve the recommended draft RSP as submitted, modify the RSP or remand all or any portion of it back with guidance for development of a revised recommendation. The Board of Directors may consider the RSP in executive session, and shall consider in its deliberations the views of the subcommittee of the Board of Directors reflecting

the public meeting held pursuant to Section 7.2 of this Attachment. In considering whether to approve the draft RSP, the Board of Directors may, if it finds a proposed Reliability Benefit Upgrade not to be viable, or if no Reliability Benefit Upgrade has been proposed, direct the ISO staff to meet with the affected load serving entities and State entities in order to develop an interim solution. Should that effort fail, and as a last resort, the Board of Directors may direct the ISO to issue a Request For Alternative Proposal (“RFAP”), subject to the procedures described below, and may withhold approval of the draft RSP, or portions thereof, pending the results of that RFAP and any Commission action on any resulting jurisdictional contract or funding mechanism. The ISO shall provide a written explanation as to any subsequent changes or modification made in the final version of the RSP.

**(b) Requests For Alternative Proposals**

(i) The RFAP shall seek generation, demand-side and merchant transmission alternatives that can be implemented rapidly and provide substantial reliability benefits over the period solicited in the RFAP, and normally will focus on an interim (“gap”) solution until an identified Reliability Transmission Upgrade has been placed in-service. The ISO will file a proposed RFAP with the Commission for approval at least 60 days prior to its issuance. The filing shall explain why the issuance of an RFAP is necessary.

(ii) The ISO staff shall provide the Board of Directors and subject to confidentiality requirements, the Planning Advisory Committee with an analysis of the alternatives offered in response to the RFAP, and provide a recommendation together with a funding mechanism reflecting input from the Planning Advisory Committee.

(iii) The ISO may enter into contracts awarded pursuant to an RFAP process, and/or propose a funding mechanism. Bidders that are awarded contracts through the RFAP process shall file those contracts with the Commission for approval of the rates to be charged thereunder to the extent that such contracts are for services that are jurisdictional to the Commission. The ISO shall file related or separate funding mechanisms with the Commission as well. All other contracts entered into pursuant to an RFAP shall be filed with the Commission for informational purposes.



- (iv) The Board of Directors will reflect the results of the RFAP process in the approved RSP.

## **8. Obligations of PTOs to Build; PTOs' Obligations, Conditions and Rights**

In accordance with the TOA, PTOs designated by the ISO as the appropriate entities to construct and own or finance Transmission Upgrades included in the RSP shall construct and own or finance such facilities or enter into appropriate contracts to fulfill such obligations. In the event that a PTO: (i) does not construct or indicates in writing that it does not intend to construct a Transmission Upgrade included in the RSP; or (ii) demonstrates that it has failed (after making a good faith effort) to obtain necessary approvals or property rights under applicable law, the ISO shall promptly file with the Commission a report on the results of the planning process, which report shall include a report from the PTO responsible for the planning, design or construction of such Open Access Transmission Tariff Section II – Attachment K – Regional System Planning Process Transmission Upgrade, in order to permit the Commission to determine what action, if any, it should take.

In connection with regional system planning, the ISO will not propose to impose on any PTO obligations or conditions that are inconsistent with the explicit provisions of the TOA or deprive any PTO of any of the rights set forth in the TOA.

Subject to necessary approvals and compliance with Section 2.06 of the TOA, nothing in this OATT shall affect the right of any PTO to expand or modify its transmission facilities in the New England Transmission System on its own initiative or in response to an order of an appropriate regulatory authority. Such expansions or modifications shall conform with: (a) Good Utility Practice; (b) applicable reliability principles, guidelines, criteria, rules, procedures and standards of national, regional, and local reliability councils that may be in existence; and (c) the ISO and relevant PTO criteria, rules, standards, guides and policies. The ISO reserves its right to challenge the permitting of such expansions or modifications.

## **9. Merchant Transmission Facilities**

### **9.1 General**

Subject to compliance with the requirements of the Tariff and any other applicable requirements with respect to the interconnection of bulk power facilities with the New England Transmission System, any

entity shall have the right to propose and construct the addition of transmission facilities (“Merchant Transmission Facilities”), none of the costs of which shall be covered under the cost allocation provisions of this OATT. Any such Merchant Transmission Facilities shall be subject to the requirements of Section 9.2 of this Attachment. In performing studies in connection with the RSP, the prospect that proposed Merchant Transmission Facilities will be completed shall be accounted for as will the prospect that proposed generating units will be completed.

## **9.2 Operation and Integration**

All Merchant Transmission Facilities shall be subject to: (i) an agreement to transfer to the ISO operational control authority over any facilities which constitute part of the Merchant Transmission Facilities that are to be integrated with, or that will affect, the New England Transmission System; and (ii) taking such other action as may be required to make the facility available for use as part of the New England Transmission System.

## **9.3 Control and Coordination**

Until such time as a Merchant Transmission Owner has transferred operational control over its Merchant Transmission Facilities to the ISO pursuant to Section 9.2(i), all such Merchant Transmission Facilities shall be subject to the operational control, scheduling and maintenance coordination of the System Operator in accordance with the Tariff.

## **10. Cost Responsibility for Transmission Upgrades**

The cost responsibility for each upgrade, modification or addition to the transmission system in New England that is included with the status of “Planned” in the RSP Project List as defined in Section 3.6 of this Attachment shall be determined in accordance with Schedule 12 of this OATT.

## **11. Allocation of ARRs**

The allocation of ARRs in connection with Transmission Upgrades is addressed in Section III.C.8 of the Tariff.

## **12. Dispute Resolution Procedures**

### **12.1 Objective**

Section 12 of this Attachment sets forth a dispute resolution process (the “Regional Planning Dispute Resolution Process”) through which regional transmission planning-related disputes may be resolved as expeditiously as possible.

### **12.2 Confidential Information and CEII Protections**

All information disclosed in the course of the Regional Planning Dispute Resolution Process shall be subject to the protection of confidential information and CEII consistent with the ISO New England Information Policy and CEII policy.

### **12.3 Eligible Parties**

Any member of the Planning Advisory Committee that has been adversely affected by a Reviewable Determination, defined in Section 12.4(a) of this Attachment, with respect to the regional system planning process described in this Attachment is eligible to raise its dispute, as appropriate, under this Dispute Resolution Process (“Disputing Party”).

### **12.4 Scope**

In order to ensure that the regional transmission planning process set forth under this Attachment moves expeditiously forward, the scope of issues that may be subject to the Regional Planning Dispute Resolution Process under this Section 12 shall be limited to certain key procedural and substantive decisions made by the ISO within its authority as specified in documents on file with the Commission. That is, decisions not subject to resolution within the jurisdiction of the Commission are not within the scope of the Regional Planning Dispute Resolution Process. Examples of matters not within the scope of the Regional Planning Dispute Resolution Process include planning to serve retail native load or state siting issues. Additionally, the Tariff already explicitly provides specific dispute resolution procedures for various matters. To this end, any matter regarding the review and approval of applications pursuant to Section I.3.9 of the Tariff, which is subject to the dispute resolution process under Section I.6 of the Tariff, shall not be within the scope of this Regional Planning Dispute Resolution Process. Similarly, any matter regarding Transmission Cost Allocation shall be governed by the dispute resolution process under Schedule 12 of the OATT, and shall be outside the scope of this Regional Planning Dispute Resolution Process.

#### **(a) Reviewable Determinations**

The determinations that may be subject to the Regional Planning Dispute Resolution Process under this Section 12 that include certain procedural and substantive challenges that may arise at limited designated key decision points in the regional transmission planning process for PTF. Procedural challenges will be limited to whether or not the steps taken up to a designated key decision point conform to the requirements set forth in this Attachment. Substantive challenges will be limited to whether or not a determination or conclusion rendered at a designated key decision point was supported by adequate basis in fact.

The designated key decision points for Reviewable Determinations shall be limited to the following:

- (i) Results of a Needs Assessment conducted and communicated by the ISO to the Planning Advisory Committee as specified in Section 4.1 of this Attachment;
- (ii) Updates to the RSP Project List, including adding, removing or revising regulated transmission solutions included thereunder, as presented at the Planning Advisory Committee and as specified in Section 3.6 of this Attachment;
- (iii) Results of Solutions Studies conducted and communicated by the ISO to the Planning Advisory Committee as specified in Section 4.2 of this Attachment;
- (iv) Consideration of market responses in Needs Assessments as specified in Section 4.1(f) of this Attachment;
- (v) Prioritization and substance of Stakeholder-Requested Scenarios to be conducted by the ISO in a given Economic Study cycle as specified in Section 17.2(d) of this Attachment;  
and
- (vi) Prioritization of Economic Study scenario sensitivities to be performed in a given Economic Study cycle where the Planning Advisory Committee is not able to prioritize them as specified in Section 17.4 of this Attachment.

**(b) Material Adverse Impact**

In order to prevail in a challenge to a procedural-based Reviewable Determination, the Disputing Party must show that the alleged procedural error had a material adverse impact on the determination or conclusion. In order to prevail in a challenge to a substantive-based Reviewable Determination, the Disputing Party must show that either (i) the determination is based on incorrect data or assumptions or (ii) incorrect analysis was performed by the ISO, and (iii) as a result the ISO made an incorrect decision or determination.

**12.5 Notice and Comment**

A Disputing Party aggrieved by a Reviewable Determination shall have fifteen (15) calendar days upon learning of the Reviewable Determination following the ISO's presentation of such Reviewable Determination at the Planning Advisory Committee to request dispute resolution by giving notice to the ISO ("Request for Dispute Resolution"). A Request for Dispute Resolution shall be in writing and shall be addressed to the ISO's Chair of the Planning Advisory Committee and, as appropriate, the affected Transmission Owner. Within three (3) Business Days of the receipt by the ISO of a Request for Dispute Resolution, the ISO shall prepare and distribute to all members of the Planning Advisory Committee a notice of the Request for Dispute Resolution including, subject to the protection of Confidential Information and CEII, the specifics of the Request for Dispute Resolution and providing the name of an ISO representative to whom any comments may be sent. Any member of the Planning Advisory Committee may submit to the ISO's designated representative, on or before the tenth (10th) Business Day following the date the ISO distributes the notice of the Request for Dispute Resolution, written comments to the ISO with respect to the Request for Dispute Resolution. The party filing the Request for Dispute Resolution may respond to any such comments by submitting a written response to the ISO's designated representative and to the commenting party on or before the fifteenth (15th) Business Day following the date the ISO distributes the notice of the Request for Dispute Resolution. The ISO may, but is not required to, consider any written comments.

**12.6 Dispute Resolution Procedures**

**(a) Resolution Through the Planning Advisory Committee**

The Planning Advisory Committee shall discuss and resolve any dispute arising under this Attachment involving a Reviewable Determination, as defined in Section 12.4 of this Attachment, between and among the ISO, the Disputing Party, and, as appropriate, the affected Transmission

Owner (collectively, “Parties”) (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution).

**(b) Resolution Through Informal Negotiations**

To the extent that the Planning Advisory Committee is not able to resolve a dispute arising under this Attachment involving a Reviewable Determination, as defined in Section 12.4 of this Attachment, between and among the ISO, the Disputing Party, and, as appropriate, the affected Transmission Owner, such dispute shall be the subject of good-faith negotiations among the Parties. Each Party shall designate a fully authorized senior representative for resolution on an informal basis as promptly as practicable.

**(c) Resolution Through Alternative Dispute Resolution**

In the event the designated representatives are unable to resolve the dispute through informal negotiation within thirty (30) days, or such other period as the Parties may agree upon, by mutual agreement of the Parties, such dispute may be submitted to mediation or any other form of alternative dispute resolution upon the agreement of all Parties to participate in such mediation or other alternative dispute resolution process. Such form of alternative dispute resolution shall not include binding arbitration.

If a Party identifies exigent circumstances reasonably requiring expedited resolution of the dispute, such Party may file a Complaint with the Commission or seek other appropriate redress before a court of competent jurisdiction.

**12.7 Notice of Dispute Resolution Process Results**

Within three (3) Business Days following the resolution of a dispute pursuant to either Section 12.6(b) or Section 12.6(c) of this Attachment, the ISO shall distribute to the Planning Advisory Committee a document reflecting the resolution.

**13. Rights Under The Federal Power Act**

Nothing in this Attachment shall restrict the rights of any party to file a Complaint with the Commission under relevant provisions of the Federal Power Act.

**14. Annual Assessment of Transmission Transfer Capability**

Each year, the ISO shall issue the results of the annual assessment of transmission transfer capability, conducted pursuant to applicable NERC, NPCC and ISO New England standards and criteria and the identification of potential future transmission system weaknesses and limiting facilities that could impact the transmission system's ability to reliably transfer energy in the planning horizon. Each annual assessment will identify those portions of the New England system, along with the associated interface boundaries, that should be considered in the assessment of Capacity Zones to be modeled in the Forward Capacity Market pursuant to ISO Tariff Section III.12. This report will be posted on the ISO website. Each annual assessment will model out-of-service resources associated with the following bids, if the ISO determines the removal of the resource is likely to have an impact on the transmission transfer limits for the relevant period: Retirement De-List Bids, Permanent De-List Bids, demand bids submitted for the upcoming substitution auction, and rejected for reliability Static De-List Bids and rejected for reliability Dynamic De-List Bids from the most recent Forward Capacity Auction.

**15. Procedures for the Conduct of Cluster Enabling Transmission Upgrades Regional Planning Study**

The purpose of this Section 15 is to support the conduct of Interconnection Studies under the Interconnection Procedures set forth in Schedules 22, 23 and 25 of Section II of the Tariff. Other than Section 2 of this Attachment K regarding the responsibilities of the Planning Advisory Committee and this Section 15, none of the other provisions in this Attachment K apply to the conduct of the Cluster Enabling Transmission Upgrade Regional Planning Study or the results of the study.

**15.1 Notice of Initiation of Cluster Enabling Transmission Upgrade Regional Planning Study in Support of Cluster Studies under the Interconnection Procedures.**

Pursuant to Section 4.2.2 of Schedule 22, Section 1.5.3.2 of Schedule 23, and Section 4.2.2 of Schedule 25 of Section II of this Tariff, the ISO shall provide notice to the Planning Advisory Committee of the initiation of a cluster for studying certain Interconnection Requests. The cluster study process, known as Clustering, shall consist of two phases. This notice shall trigger the first phase of Clustering, during which the ISO shall conduct a Cluster Enabling Transmission Upgrade ("CETU") Regional Planning Study ("CRPS") (the cost of which will be recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff). In the second phase of Clustering, the ISO shall conduct Interconnection System Impact

Studies and Interconnection Facilities Studies in clusters pursuant to Schedules 22, 23 and 25 of Section II of the Tariff.

## **15.2 Preparation for Conduct of CRPS; Stakeholder Input**

The purpose of the CRPS shall be to identify the new transmission infrastructure and any associated system upgrades to enable the interconnection of potentially all of the resources proposed in the Interconnection Requests for which the conditions identified in Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff have been triggered. The ISO will prepare and post on its website, consistent with Section 2.4(d) of this Attachment K, a proposed scope of the CRPS and associated parameters and assumptions, and provide the foregoing to the Planning Advisory Committee. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit stakeholder input for consideration by the ISO on the CRPS's scope, parameters and assumptions, consistent with the responsibilities of the Planning Advisory Committee as set forth in Section 2.2 of this Attachment. As part of the CRPS's scope, the ISO will describe the circumstances that triggered the conditions in Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff. In addition, the ISO will identify: (i) the Interconnection Requests, to be referenced by Queue Position, that are expected to be eligible to participate in the Cluster Interconnection System Impact Study, and (ii) the preliminary transmission upgrade concepts proposed to be considered in the CRPS. The preliminary transmission upgrade concepts may account for previously conducted transmission reinforcement studies and previously identified concepts for transmission upgrades in the relevant electrical area, including Elective Transmission Upgrades with Interconnection Requests pending in the interconnection queue prior to the initiation of the CRPS.

A member of the Planning Advisory Committee or an Interconnection Customer may make a written submission to the ISO, requesting that Clustering be considered for specific Interconnection Requests in the ISO New England interconnection queue. In response to such a request, the ISO will either develop a notice of initiation of a cluster pursuant to Section 15.1 of this Attachment K, or identify, in writing, to the Planning Advisory Committee why the conditions in Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff have not been triggered.

## **15.3 Conduct of the CRPS**



The CRPS will consist of analyses performed under the conditions used in the conduct of an Interconnection System Impact Study under the Interconnection Procedures. The CRPS will consist of steady state thermal analysis, voltage and transient stability analysis, and, as appropriate, other analysis, such as weak-grid-related analyses. The ISO will use Reasonable Efforts to complete the CRPS within twelve (12) months from the notice of the cluster initiation to the Planning Advisory Committee. If less than two (2) Interconnection Requests identified pursuant to Section 4.2.1 of Schedule 22, Section 1.5.3.1 of Schedule 23, and Section 4.2.1 of Schedule 25 of Section II of the Tariff remain in the interconnection queue prior to the completion of the CRPS, the ISO will terminate the CRPS.

#### **15.4 Publication of the CRPS**

The ISO shall post a draft report of the CRPS to the Planning Advisory Committee, consistent with Section 2.4(d) of this Attachment K, and a meeting of the Planning Advisory Committee will be held promptly thereafter in order to discuss the results of the CRPS. A comment period will follow the Planning Advisory Committee meeting. The ISO will post on its website any comments received and the ISO's responses to those comments.

The CRPS report will provide:

- (i) a planning level description of the CETU(s) and a non-binding good faith order-of-magnitude estimate, developed by the applicable Transmission Owner(s), of the costs for the CETU(s);
- (ii) a list of other facilities that may be needed in addition to the CETU(s) and a non-binding good faith order-of-magnitude estimate, developed by the applicable Transmission Owner(s), of the costs for those facilities (the CRPS will not provide descriptions of expected Interconnection Facilities for specific Interconnection Requests in the cases where the Interconnection Facilities cannot be finalized until the actual Interconnection Requests that will be moving forward in the cluster are known);
- (iii) the approximate megawatt quantity (or quantities if more than one level of megawatt injection was studied in the CRPS) of resources that could be interconnected in a manner that meets the Network Capability Interconnection Standard and the Capacity Capability

Interconnection Standard in accordance with Schedules 22, 23 and 25 of Section II of the Tariff; and,

- (iv) a list of the Interconnection Requests, to be referenced by Queue Position, that at the sole discretion of the ISO are identified as eligible to participate in the Cluster Interconnection System Impact Study that will be conducted by the ISO in accordance with Section 4.2.3 of Schedule 22, Section 1.5.3.3 of Schedule 23, and Section 4.2.3 of Schedule 25 of Section II of the Tariff. The list shall include the expected cost allocation for the eligible Interconnection Requests, calculated in accordance with Schedule 11 of Section II of the Tariff.

The non-binding good faith order-of-magnitude estimates under Section 15.4(i)-(ii) of this Attachment will be developed by the applicable Transmission Owner(s), and the costs of developing such estimates shall be recovered as specified in Sections 3.3.1, 6.1 and 7.2 of Schedule 22, Section 3.3.1, 3.4.2, and Attachment 1 of Schedule 23, and Section 3.3.1, 6.1 and 7.2 of Schedule 25.

The posting, consistent with Section 2.4 (d) of this Attachment K, of the final CRPS report on the ISO website will trigger the Cluster Interconnection System Impact Study Entry Deadline specified in Section 4.2.3.1 of Schedule 22, Section 1.5.3.3.1 of Schedule 23, and Section 4.2.3.1 of Schedule 25 of Section II of the Tariff. The Cluster Interconnection System Impact Study Entry Deadline shall be 30 days from the posting of the final CRPS report.

Notwithstanding any other provision in this Section 15, the final Maine Resource Integration Study shall be the first CRPS and will form the basis for the first Cluster Interconnection System Impact Study to be conducted in accordance with Section 4.2.3 of Schedule 22, Section 1.5.3.3 of Schedule 23, and Section 4.2.3 of Schedule 25 of Section II of the Tariff.

## **16. Procedures for the Conduct of Longer-Term Transmission Studies**

This Section 16 sets forth the procedures for the ISO's conduct of Longer-Term Transmission Studies. Other than Section 2, regarding the responsibilities of the Planning Advisory Committee, Section 5, regarding the supply of information, and this Section 16 of this Attachment K, none of the other provisions in this Attachment K apply to the conduct of the Longer-Term Transmission Studies. These

procedures supplement, and are not intended to replace, other study processes provided in this Attachment K.

### **16.1 Request for Longer-Term Transmission Studies**

NESCOE may submit a request for the ISO to conduct a Longer-Term Transmission Study to identify high-level concepts of transmission infrastructure and, if requested, high-level cost estimates that could meet State-identified Requirements specified in the request based on state-identified scenarios and timeframes, which may extend beyond the five-to-ten year planning horizon. A request for a Longer-Term Transmission Study may be submitted to the ISO no earlier than six months from conclusion of the prior study. The Longer-Term Transmission Study request shall identify the State-identified Requirements that serve as the basis of the request; the proposed objectives of the study; and the scenarios and timeframe(s) proposed for use in the study.

### **16.2 Preparation for Conduct of the Longer-Term Transmission Studies; Stakeholder Input**

Upon receipt of a request for a Longer-Term Transmission Study from NESCOE, the ISO will post the request on the ISO's website. A meeting of the Planning Advisory Committee will be held promptly thereafter for NESCOE to present the Longer-Term Transmission Study request. NESCOE will then provide the ISO written confirmation of the specific scenarios to be analyzed in the study, together with the specific information to facilitate the conduct of the study, including, but not limited to: assumptions, types and location of new resource development, location of new loads and load serving stations, and injection points or geographic zones. The ISO will then develop a scope of work that may be performed, and post on the ISO's website the Longer-Term Transmission Study's proposed scope of work, associated parameters, and assumptions. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit stakeholder input on the study's scope, parameters, and assumptions. Members of the Planning Advisory Committee shall direct all such input related to the Longer-Term Transmission Study's scope, parameters, and assumptions to the ISO for consideration by the ISO and NESCOE, as applicable. Depending on the scope and objectives of a Longer-Term Transmission Study request, the ISO may request information to support consideration of new loads in the study. The ISO will provide the final scope of work for the Longer-Term Transmission Study to NESCOE for confirmation, and once written confirmation is received, will post the final scope of work on the ISO's website.

### **16.3 Conduct of the Longer-Term Transmission Study; Stakeholder Input**

The ISO, in consultation with NESCOE, will perform the Longer-Term Transmission Study, supplemented by third-party consultants as necessary. The ISO may ask Participating Transmission Owners or Planning Advisory Committee members with special expertise to provide technical support or assist in the performance of the study. The study will consist of transmission system analysis to be performed under the conditions specified in the confirmed scope of work. If the ISO identifies a need to deviate from the final scope of work, the ISO will consult with NESCOE prior to incorporating the change. Once NESCOE provides written confirmation, the ISO will notify the Planning Advisory Committee of any changes. The study will assess the ability of the PTF to meet applicable planning criteria under the provided conditions.

The costs of the performance of the Longer-Term Transmission Study will be recovered pursuant to Schedule 1 of Section IV.A of the Tariff.

The ISO will post on the ISO's website the results of the Longer-Term Transmission Study. A meeting of the Planning Advisory Committee will be held promptly thereafter in order to solicit input on the study results. Members of the Planning Advisory Committee shall direct all such input related to the Longer-Term Transmission Study results to the ISO for consideration by the ISO and NESCOE, as applicable.

The ISO, in consultation with NESCOE, will prepare a Longer-Term Study report. The report will identify the overview of transmission system limitations and the high-level concepts of transmission infrastructure and, if requested, associated cost estimates, required to solve the longer-term issues identified in the study based on the state-identified scenarios and timeframe.

## **17. Procedures for the Conduct of Economic Studies**

This Section 17 sets forth the procedures for the ISO's conduct of Economic Studies.

### **17.1 Overview**

The Economic Study process shall be used to identify market efficiency issues on the PTF portion of the New England Transmission System and, as applicable, evaluate competitive solutions to alleviate identified market efficiency needs. The process will also provide information to facilitate the evaluation

of economic and environmental impacts of New England regional policies, federal policies, and various resource technologies on satisfying future resource needs in the region.

## **17.2 Economic Study Reference Scenarios**

The ISO shall develop and study the following four reference scenarios. The ISO shall consult with, and consider the input from, the Planning Advisory Committee on the scope, parameters, and assumptions used in modeling the scenarios described in this Section 17.2.

### **(a) Benchmark Scenario**

The purpose and scope of the Benchmark Scenario is to improve the economic planning model and associated assumptions and criteria used in the other scenarios by comparing it against historical performance of the system in the previous year and adjusting the assumptions and model accordingly. This scenario will help identify any modeling issues in the base set of input data.

The initial economic planning model will use the existing base case model and data and may be adjusted based on historical performance and observations. Historical performance of the system includes recorded observations from the prior year to the beginning of the study cycle.

The study year shall be year N-1 and the simulation length shall be one year for the Benchmark Scenario.

Any identified market efficiency issues resulting from a Benchmark Scenario shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

### **(b) Market Efficiency Needs Scenario**

The purpose and scope of the Market Efficiency Needs Scenario is to identify market efficiency issues on the PTF portion of the New England Transmission System at the end of the ten-year planning horizon pursuant to Section 17.5 of this Attachment. Pursuant to Section 4.1 of this Attachment, the ISO shall conduct a market efficiency Needs

Assessment to evaluate and determine whether market efficiency issues identified in a Market Efficiency Needs Scenario are market efficiency needs.

The model used for the Market Efficiency Needs Scenario shall be the updated base case from the Benchmark Scenario and forecasted out to the ten-year planning horizon year using assumptions and criteria in Section 4.1(f) of this Attachment.

The study year shall be year N+10 and the simulation length shall be one year for the Market Efficiency Needs Scenario.

**(c) Policy Scenario**

The purpose and scope of the Policy Scenario is to identify any potential market efficiency issues resulting from the New England states' energy policies and goals, among others (e.g., federal legislation, state legislation, or utility renewable portfolio standard targets). The policies and goals selected for the Policy Scenario shall be selected by the ISO and Planning Advisory Committee pursuant to Section 17.4 of this Attachment.

The model used for the Policy Scenario shall be the base case model resulting from the Benchmark Scenario and forecasted out to a year when relevant New England and other applicable energy policies and goals are in full effect.

The study year for the Policy Scenario shall be dependent on deadlines for achieving the New England region and other energy policies and goals. However, the study year will be at least ten years into the future and cover the deadlines for achieving all applicable goals and policies. The study simulation length shall be one year.

The results from studying a Policy Scenario shall be used for informational purposes only. Any identified market efficiency issues resulting from a Policy Scenario shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

**(d) Stakeholder-Requested Scenario**

The purpose of the Stakeholder-Requested Scenario is to study a scenario with a region-wide scope that is requested by stakeholders and not covered by the other scenarios described in this Section 17.

The model used for the Stakeholder-Requested Scenario shall be the base case model resulting from the Benchmark Scenario and then forecasted out to a year with assumptions requested by the stakeholders and agreed upon by the ISO.

The study year shall be dependent on the requested scenario and the simulation length shall be one year.

The results from studying a Stakeholder-Requested Scenario shall be used for informational purposes only. Any identified market efficiency issues resulting from a Stakeholder-Requested Scenario shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

### **17.3 Frequency, Initiation, and Schedule**

The Economic Study process shall be conducted at least once every three years and at most once every two years. The process shall be initiated for the first time under this Section 17 in January 2024.

Each Economic Study cycle shall be initiated by the ISO providing the Planning Advisory Committee with notice that the ISO will be initiating the process for the Economic Study cycle. The ISO shall provide to the Planning Advisory Committee the schedule for the Economic Study cycle within three months of initiating the process. The schedule shall include dates for the ISO's collection, and stakeholders' submission, of data to be used in the studies, the preparation of models, the completion of studies, and the issuance of study results. The schedule shall include a one-month period for stakeholders to submit proposals for the Stakeholder-Requested Scenario. If the Economic Study cycle and potential resulting competitive request for proposals process cannot be completed within the initial schedule, the ISO shall notify stakeholders of such, provide a revised estimated completion date, and provide an explanation of the reason or reasons why the additional time is required.

### **17.4 Preparation of the Economic Study Reference Scenarios and Stakeholder Sensitivity Requests**

The ISO shall prepare and post on its website a proposed scope for the scenarios described in Section 17.2, and the associated parameters and assumptions. The ISO shall either provide the Planning Advisory Committee with notice that the ISO posted the information or send the information itself to the Planning Advisory Committee after it is posted. A Planning Advisory Committee meeting will be held thereafter to solicit stakeholder input for consideration by the ISO on the study's scope, parameters, and assumptions.

Following the analyses, runs, and presentation of the results of the Economic Study reference scenarios described in Section 17.2, stakeholders may request, and the ISO may propose, additional sensitivities to test the effect of a specific change to input assumptions. The sensitivities shall be limited to a single theme or category of changes to allow for better understanding of the causal effect of the change to the results. The ISO shall prioritize and list the sensitivities that can be completed during the Economic Study cycle taking into consideration the impact of the additional efforts on the ISO resources and other priorities.

Results from studies conducted with stakeholder-requested scenario sensitivities shall be used for information purposes only. Any identified market efficiency issues resulting from a study with a stakeholder-requested scenario sensitivity shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

#### **17.5 Market Efficiency Needs Assessment**

The ISO shall use the Market Efficiency Needs Scenario and criteria in Attachment N to identify market efficiency issues on the PTF portion of the New England Transmission System and, as applicable, identify market efficiency needs on the PTF portion of the New England Transmission System.

All of the market efficiency issues and associated benefits of relieving those issues will be documented in a market efficiency Needs Assessment conducted pursuant to Section 4.1 of this Attachment.

Any market efficiency issues that meet the criteria in Attachment N will be identified as market efficiency needs, and a request for proposal or multiple requests for proposals will be issued to initiate the competitive solution process for Market Efficiency Transmission Upgrades to address the identified market efficiency need or needs pursuant to Section 4.3 of this Attachment.



## **17.6 Evaluation of Regulated Transmission Solutions for Market Efficiency Transmission Upgrades**

The process in Section 4.3 of this Attachment shall be used to solicit and evaluate competitive solutions for identified market efficiency needs.

## **17.7 Stakeholder Input on Study Results**

After the results from the Economic Study reference scenarios described in Section 17.2 and stakeholder-requested scenario sensitivities described in Section 17.4 are available, the ISO shall provide such results to stakeholders at Planning Advisory Committee meetings and solicit feedback based on the results.

## **17.8 Economic Studies Requested by Individual Stakeholders**

An individual stakeholder may request that the ISO conduct Economic Studies at the stakeholder's own expense to examine situations where potential regulated transmission solutions, market responses, or investments could result in (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of this OATT, (ii) reduced congestion, or (iii) the integration of new resources or loads, or both, on an aggregate or regional basis. The scope, assumptions, and deliverables shall be agreed to by the ISO and the stakeholder requesting the study. The notice and schedule initiating the Economic Study process described in Section 17.3 shall include the dates for submitting requests for studies under this Section 17.8.

The ISO may hire a consultant to conduct the analysis, and the entity requesting the study shall be responsible for the ISO's costs for study administration, study analysis, and consultants used to perform the study.

The ISO shall provide an estimated cost and duration to each stakeholder that requests an Economic Study. Each stakeholder that requests a study under this Section 17.8 shall provide written confirmation with the ISO that the stakeholder would like the ISO to proceed with conducting the study after receiving the estimated cost and duration for the study it requested.

The results from studies conducted pursuant to this Section 17.8 shall be used for informational purposes only. Any identified market efficiency issues resulting from studies conducted pursuant to this Section 17.8 shall not be evaluated as a market efficiency need against the factors and metrics in Attachment N.

**17.9 Cost Recovery**

The costs of the Economic Study process described in Sections 17.1 through 17.7 shall be recovered by the ISO pursuant to Schedule 1 of Section IV.A of the Tariff. The costs of Economic Studies performed by the ISO under Section 17.8 of this Attachment shall be paid for by the stakeholder requesting the study.

**17.10 Coordination with PTOs**

The PTOs shall coordinate with the ISO in the performance of the Economic Study process pursuant to and as described in Section 5 of this Attachment.

**ATTACHMENT K APPENDIX 1**  
**ATTACHMENT K -LOCAL**  
**LOCAL SYSTEM PLANNING PROCESS**

**APPENDIX 1**  
**ATTACHMENT K -LOCAL**  
**LOCAL SYSTEM PLANNING PROCESS**

**1. Local System Planning Process**

**1.1 General**

In circumstances where transmission system planning for Non-Pool Transmission Facilities (“Non-PTF”)<sup>1</sup>, including Local Public Policy Transmission Upgrades, is taking place in New England that is not incorporated into the RSP planning process, the following Local System Plan (“LSP”) process will be utilized for transmission planning purposes. The purpose of the LSP is to enable formal stakeholder input to planning for Non-PTF that is not incorporated into the RSP. The LSP shall ensure the opportunity for Planning Advisory Committee participation in the LSP process. The LSP will not be subject to approval by the ISO or the ISO Board under the RSP.

**1.2 Planning Advisory Committee Review**

The Planning Advisory Committee shall periodically provide input and feedback to the PTOs concerning the development of the LSP and the conduct of associated system enhancement and expansion studies. It is contemplated that LSP issues for identified local areas will be periodically addressed at the end of regularly scheduled Planning Advisory Committee meetings. Regular meetings of the Planning Advisory Committee shall be extended as necessary to serve the purposes of this section. Each PTO contemplating the addition of new Non-PTF will present its respective LSP to the Planning Advisory Committee not less than once per year. Not less than every three years, each PTO will post a notice as part of its LSP process indicating that members of the Planning Advisory Committee, NESCOE, or any state may provide the PTO with input regarding state and federal Public Policy Requirements identified as driving transmission needs relating to Non-PTF and regarding particular local transmission needs driven by Public Policy Requirements. The PTO will provide a written explanation, to be posted on the ISO website, of why suggested transmission needs driven by Public Policy Requirements will or will not be evaluated for potential solutions in the LSP planning process.

**1.3 Role of the PTOs**

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<sup>1</sup> For absence of doubt, the PTOs clarify that Non-PTF is meant to include Category B and Local Area Facilities as defined by the TOA.

Each PTO will be responsible for administering the LSP process pertaining to its own Non-PTF, including Local Public Policy Transmission Upgrades, by presenting LSP information to the Planning Advisory Committee, developing an appropriate needs analysis and addressing LSP needs within its local area. In developing its LSP, each PTO will ensure comparable treatment of similarly situated customers or potential customers and will take into consideration data, comments and specific requests supplied by the Planning Advisory Committee, Transmission Customers and other stakeholders. To the extent that generation and/or demand resources are identified that could impact planning for Non-PTF, each PTO will take such resources into account when developing the LSP for its facilities, consistent with Good Utility Practice. Each PTO will also be responsible for addressing issues or concerns arising out of Planning Advisory Committee review of its proposed LSP and posting its LSP and the LSP Project List.

#### **1.4 Description of LSP**

The LSP shall describe the projected improvements to Non-PTF that are needed to maintain system reliability or as Local Public Policy Transmission Upgrades, and shall reflect the results of such reviews within the limited geographical areas that pertain to the LSP, as determined by each PTO (“LSP Needs Assessments”), and corresponding system planning and expansion studies. The LSP Needs Assessments will be coordinated with the RSP and include the information that the ISO-NE incorporates into the RSP plans, as applicable. The proponents of regulated transmission proposals in response to LSP Needs Assessments shall also identify any RSP plans that require coordination with their regulated transmission proposals addressing the Non-PTF system needs.

The LSP shall identify the planning process, criteria, data, and assumptions used to develop the LSP. To the extent the current LSP utilizes data, assumptions or criteria used by the ISO in the RSP, any such data, assumptions or criteria will also be identified in the LSP.

Each PTO shall consult with NESCOE and applicable states, local authorities and stakeholders to consider their views prior to including a Local Public Transmission Upgrade in its LSP, as described in Section 1.6.

Each PTO’s LSP will be made available on a website for review by the Planning Advisory Committee, Transmission Customers and other stakeholders, subject to the ISO New England Information Policy and

CEII restrictions or requirements. The ISO's posting of the RSP and the RSP Project List will include links to each PTO's specific LSP posting.

The LSP of a particular PTO shall be posted not less than 3 business days prior to its presentation by the PTO to the Planning Advisory Committee. The Planning Advisory Committee, Transmission Customers, and other stakeholders will have 30 days from the date of the PTO's presentation to the Planning Advisory Committee to provide any written comments for consideration by the PTO. The LSP shall specify the physical characteristics of the solutions that can meet the needs identified in the LSP. The LSP shall provide sufficient information to allow Market Participants to assess the quantity, general locations and operating characteristics of the type of incremental supply or demand-side resources, or merchant transmission projects, that would satisfy the identified needs or that may serve to modify, offset or defer proposed regulated transmission upgrades.

Each year's LSP shall be based upon the LSP completed in the prior year by either recertifying the results of the prior LSP or providing specific updates.

## **1.5 Economic Studies**

To the extent that the ISO selects any Economic Studies pursuant to Section 4.1(b) of Attachment K or otherwise performs Economic Studies that will impact Non-PTF, the PTOs will coordinate with the ISO in the performance of such Economic Studies.

## **1.6 Public Policy Studies**

As part of the LSP process, each PTO will evaluate potential transmission solutions on its Non-PTF system that are likely to be both efficient and cost-effective for meeting Public Policy Requirements.

### **1.6A Process to Identify Public Policy Requirements Driving Non-PTF Transmission Needs**

Within six months of publication, each PTO will review the Public Policy Requirements posted by the ISO to determine and evaluate at a high level any public policy needs potentially driving transmission needs on their respective Non-PTF systems. Such evaluations will also include potential public policy needs suggested by third parties. Each PTO will review NESCOE's written explanation of which transmission needs driven by state or federal Public Policy Requirements will be evaluated by the ISO and why other suggested transmission needs will not be evaluated. If NESCOE does not provide a listing

of identified transmission needs and explanation, each PTO will review the ISO's explanations of which transmission needs driven by state or federal Public Policy Requirements will be evaluated by the ISO and why other suggested transmission needs will not be evaluated. In addition, each PTO will review the ISO's explanation of which transmission needs driven by local Public Policy Requirements will be evaluated in the regional system planning process and why other suggested transmission needs driven by local Public Policy requirements will not be evaluated. Each PTO will then determine if any of the posted state, federal or local Public Policy Requirements are driving a need on its Non-PTF transmission system and will include the non-PTF needs in its local planning process.

As part of the local planning process, each PTO will list the identified transmission needs on its non-PTF transmission system driven by state, federal, or local Public Policy Requirements that will be evaluated, and provide an explanation of why any identified transmission needs will not be evaluated as part of its LSP. The list will be posted in the PTO's LSP and presented at the annual PAC meeting. The PTO will seek input at the PAC meeting from stakeholders about whether further study is warranted to identify solutions for local transmission system needs and seek recommendations about whether to proceed with such studies. A stakeholder may provide written input on the list within 30 days from the date of presentation for consideration by the PTO. Each PTO will then confirm, or modify if appropriate, its determination of which identified transmission needs on its non-PTF transmission system driven by state, federal, or local Public Policy Requirements will be evaluated and which will not be evaluated, and revise its annual LSP accordingly. If the potential Non-PTF transmission needs identified would affect the Non-PTF facilities of more than one PTO, the affected PTOs will coordinate their efforts with other affected PTOs, as necessary.

#### **1.6B Procedure for Evaluating Potential Public Policy Solutions on the Non-PTF**

Once it has been determined that a non-PTF need driven by state, federal or local Public Policy Requirements will be evaluated, each PTO will prepare a scope and associated assumptions as part of a Public Policy Local Transmission Study. For those needs where a scope is available, a PTO may present the proposed scope for the Public Policy Local Transmission Study within its LSP and as part of its LSP presentation described in Section 1.6A. A stakeholder may provide written input to the scope within 30 days after the LSP presentation for the PTO to consider.

Each PTO will schedule a follow-up PAC meeting presentation for additional stakeholder input within 4 months after the PTO's LSP presentation as described in Section 1.6A if the proposed scope for a Public Policy Local Transmission Study was not included in its annual LSP presentation. Within 30 days after

the follow-up meeting, a stakeholder may provide written input to the scope for the PTO to consider. Subsequently, the PTO will determine the study scope for the Public Policy Local Transmission Study and revise its annual LSP.

In preparation of a Public Policy Local Transmission Study that will be presented to the PAC as part of the LSP for the following year, the PTO will undertake the following: First, the PTO will perform the initial phase of the Public Policy Local Transmission Study to develop an estimate of costs and benefits and post its preliminary results on a website. Second, the PTO will use good faith efforts to contact stakeholders and the appropriate state and/or local authorities informing them of the posting, requesting input on whether further study is warranted to identify solutions for local transmission system needs, and seeking recommendations about whether to proceed with further planning and construction of a Local Public Policy Transmission Upgrade. Each PTO will then make a determination of whether further study is warranted to identify solutions for local transmission system needs, or will select its final solution, and revise its annual LSP accordingly. If the potential Non-PTF transmission needs identified would affect the Non-PTF facilities of more than one PTO, the affected PTOs will coordinate their efforts with other affected PTOs, as necessary. Results of a Public Policy Local Transmission Study will be provided to the PAC as part of the LSP for the following year.

## **2. Posting of LSP Project List**

Each PTO shall develop, maintain and make available on a website, a cumulative listing of proposed regulated transmission solutions that may meet LSP needs (the “LSP Project List”). The LSP Project List will be updated at least annually. The LSP Project List shall also provide reasons for any new Non-PTF, including Local Public Policy Transmission Upgrades, any change in status of proposed Non-PTF, including Local Public Policy Transmission Upgrades, or any removal of proposed Non-PTF, including Local Public Policy Transmission Upgrades, from the LSP Project List. Each PTO will be individually responsible for publicly posting and updating the status of its respective LSP and the transmission projects arising therefrom on a website in a format comparable to the manner in which RSP plans and projects are posted on the RSP Project List. The ISO’s posting of the RSP and RSP Project List will include links to each PTO’s specific LSP Project List.

## **3. Posting of Assumptions and Criteria**

Each PTO will make available on a website the planning criteria and assumptions used in its current LSP. A link to each PTO’s planning criteria and assumptions will be posted on the ISO website.

#### **4. Cost Responsibility for Transmission Upgrades**

The cost responsibility for each upgrade, modification or addition to the transmission system in New England that is included in the LSP Project List of this Appendix 1 shall be determined in accordance with Schedule 21 of this OATT.

#### **5. LSP Dispute Resolution Procedures**

##### **5.1 Objective**

Section 5 of this Appendix 1 sets forth an LSP dispute resolution process (the "LSP Dispute Resolution Process") through which LSP-related transmission planning-related disputes may be resolved as expeditiously as possible.

##### **5.2 Confidential Information and CEII Protections**

All information disclosed in the course of the LSP Dispute Resolution Process shall be subject to the protection of confidential information and CEII consistent with the ISO New England Information Policy and CEII policy.

##### **5.3 Eligible Parties**

Any member of the Planning Advisory Committee that has been adversely affected by a PTO's Reviewable Determination with respect to the LSP transmission planning process described in this Appendix 1 is eligible to raise its dispute, as appropriate, under this LSP Dispute Resolution Process ("Disputing Party").

##### **5.4 Scope**

In order to ensure that the LSP transmission planning process set forth under this Appendix 1 moves expeditiously forward, the scope of issues that may be subject to the LSP Dispute Resolution Process under this Section 5 shall be limited to certain key procedural and substantive decisions made by the applicable PTO within its authority as specified in documents on file with the Commission. That is, decisions not subject to resolution within the jurisdiction of the Commission are not within the scope of this LSP Dispute Resolution Process. Examples of matters not within the scope of the LSP Dispute Resolution Process include planning to serve retail native load or state siting issues. Additionally, the



Tariff already explicitly provides specific dispute resolution procedures for various matters. To this end, any matter regarding the review and approval of applications pursuant to Section I.3.9 of the Tariff, which is subject to the dispute resolution process under Section I.6 of the Tariff, shall not be within the scope of this LSP Dispute Resolution Process. Similarly, any matter regarding Transmission Cost Allocation shall be governed by the dispute resolution process under Schedule 12 of the OATT, and shall be outside the scope of this LSP Dispute Resolution Process.

**(a) Reviewable Determinations:**

The LSP determinations made by the applicable PTO that may be subject to the LSP Dispute Resolution Process under this Section 5 ("Reviewable LSP Determination") shall include certain procedural and substantive challenges at designated key decision points during the LSP transmission planning process for Non-PTF, including Local Public Policy Transmission Upgrades ("Key LSP Decision Points"). Procedural challenges will be limited to whether or not the steps taken up to a Key LSP Decision Point conform to the requirements set forth in this Appendix 1. Substantive challenges will be limited to whether or not a determination or conclusion rendered at a Key LSP Decision Point was supported by adequate basis in fact. The Key LSP Decision Points shall be limited to the following:

- (i) Results of an LSP Needs Assessment conducted and communicated by a PTO to the Planning Advisory Committee as specified in this Appendix 1;
- (ii) Updates to the LSP Project List, including adding, removing or revising regulated Non-PTF transmission solutions included thereunder, as presented at the Planning Advisory Committee and as specified in this Appendix 1;
- (iii) Results of Non-PTF transmission solutions studies, including any Local Public Policy Transmission Upgrade studies, conducted and communicated by the PTO to the Planning Advisory Committee as specified in this Appendix 1; and
- (iv) Consideration of market responses in LSP Needs Assessments as specified in this Appendix 1.

### **(b) Material Adverse Impact**

In order to prevail in a challenge to a procedural-based Reviewable LSP Determination, the Disputing Party must show that the alleged procedural error had a material adverse impact on the determination or conclusion made by the applicable PTO. In order to prevail in a challenge to a substantive-based Reviewable LSP Determination, the Disputing Party must show that either (i) the determination is based on incorrect data or assumptions or (ii) incorrect analysis was performed by the PTO, and (iii) as a result thereof, the PTO made an incorrect decision or determination.

## **5.5 Notice and Comment**

A Disputing Party aggrieved by a PTO's Reviewable LSP Determination shall have fifteen (15) calendar days upon learning of the Reviewable LSP Determination following the PTO's presentation of such LSP Reviewable Determination at the Planning Advisory Committee to request dispute resolution by giving notice to the Applicable PTO ("Request for LSP Dispute Resolution").

A Request for LSP Dispute Resolution shall be in writing and shall be provided to the applicable PTO and, as appropriate, other affected Transmission Owners. Within three (3) Business Days of the receipt by a PTO of a Request for Dispute Resolution, the PTO, in coordination with the ISO, shall prepare and distribute to all members of the Planning Advisory Committee a notice of the Request for Dispute Resolution including, subject to the protection of Confidential Information and CEII, the specifics of the Request for Dispute Resolution and providing the name of a PTO representative to whom any comments may be sent. Any member of the Planning Advisory Committee may submit to the PTO's designated representative, on or before the tenth (10th) Business Day following the date the PTO distributes the notice of the Request for Dispute Resolution, written comments to the PTO with respect to the Request for Dispute Resolution. The Disputing Party filing the Request for Dispute Resolution may respond to any such comments by submitting a written response to the PTO's designated representative and to the commenting party on or before the fifteenth (15th) Business Day following the date the PTO distributes the notice of the Request for Dispute Resolution. The PTO may, but is not required to, consider any written comments.

## **5.6 Dispute Resolution Procedure**

### **(a) Resolution Through the Planning Advisory Committee**

The Planning Advisory Committee shall discuss and resolve any LSP related dispute arising under this Appendix 1 involving a Reviewable LSP Determination, as defined in Section 5.4 of this Appendix 1, between and among the applicable PTO, the Disputing Party, and, as appropriate, other affected Transmission Owners and the ISO (collectively, “Parties”) (excluding applications for rate changes or other changes to the Tariff, or to any Service Agreement entered into under the Tariff, which shall be presented directly to the Commission for resolution).

**(b) Resolution Through Informal Negotiation**

To the extent that the Planning Advisory Committee is not able to resolve a dispute arising under this Appendix 1 involving a Reviewable LSP Determination, as defined in Section 5.4 of this Appendix 1, between and among the Parties, such dispute shall be the subject of good-faith negotiations among the Parties. Each Party shall designate a fully authorized senior representative for resolution on an informal basis as promptly as practicable.

**(c) Resolution Through Alternative Dispute Resolution**

In the event the designated representatives are unable to resolve the dispute through informal negotiations within thirty (30) days, or such other period as the Parties may agree upon, by mutual agreement of the Parties, such LSP related dispute may be submitted to mediation or any other form of alternative dispute resolution upon the agreement of all Parties to participate in such mediation or other alternative dispute resolution process. Such form of alternative dispute resolution shall not include binding arbitration.

If a Party identifies exigent circumstances reasonably requiring expedited resolution of the LSP related dispute, such Party may file a Complaint with the Commission or seek other appropriate redress before a court of competent jurisdiction

**5.7 Notice of Results of Dispute Resolution**

Within three (3) Business Days following the resolution of a dispute pursuant to either Section 5.6(b) or 5.6(c) of this Appendix 1, the PTO shall distribute to members of the Planning Advisory Committee a document reflecting the resolution.

**5.8 Rights under the Federal Power Act:**

Nothing in this Appendix 1 shall restrict the rights of any party to file a complaint with the Commission under relevant provisions of the Federal Power Act.

**ATTACHMENT K APPENDIX 2**  
**LIST OF ENTITIES ENROLLED IN THE TRANSMISSION PLANNING REGION**  
**ENTITIES**

## **APPENDIX 2**

### **ATTACHMENT K**

#### **LIST OF ENTITIES ENROLLED IN THE TRANSMISSION PLANNING REGION**

The entities listed in this Appendix 2 are those enrolled for the purpose of participating as a transmission provider in the New England transmission planning region pursuant to Attachment K as of the date the revisions to this Appendix 2 were filed with the Commission. The most current list of entities enrolled for the purpose of participating as a transmission provider in the New England transmission planning region pursuant to Attachment K is available on the ISO-NE website. This Appendix 2 will be updated to reflect any subsequent enrollments as part of unrelated OATT filings at the time ISO-NE undertakes such unrelated filings.

Town of Braintree Electric Light Department

Central Maine Power Company

The City of Chicopee Municipal Lighting Department

The City of Holyoke Gas and Electric Department

The Connecticut Light and Power Company

Connecticut Municipal Electric Energy Cooperative

Connecticut Transmission Municipal Electric Energy Cooperative

Cross-Sound Cable Company, LLC

Emera Maine

Fitchburg Gas and Electric Light Company

Green Mountain Power Corporation

Hudson Light & Power Department

Massachusetts Municipal Wholesale Electric Company

Maine Electric Power Company

Middleborough Gas and Electric Department

New England Electric Transmission Corporation

New England Energy Connection, LLC

New England Hydro-Transmission Corporation

New England Hydro-Transmission Electric Company Inc.

New England Power Company

New Hampshire Electric Cooperative, Inc.

New Hampshire Transmission, LLC

Eversource Energy Service Company as agent for: The Connecticut Light and Power Company, NSTAR Electric Company, Public Service Company of New Hampshire, and Western Massachusetts Electric Company

Norwood Municipal Light Department

NSTAR Electric Company

Public Service Company of New Hampshire

Shrewsbury Electric & Cable Operations

Taunton Municipal Lighting Plant

Town of Reading Municipal Light Department

The United Illuminating Company

Unitil Energy Systems, Inc.

Vermont Electric Cooperative, Inc.

Vermont Electric Power Company, Inc.

Vermont Electric Transmission Company

Vermont Public Power Supply Authority

Vermont Transco LLC

Town of Wallingford CT Dept of Public Utilities – Electric Division

Western Massachusetts Electric Company

## **ATTACHMENT K APPENDIX 3**

### **LIST OF QUALIFIED TRANSMISSION PROJECT SPONSORS**

The entities listed in this Appendix 3 are those approved by ISO-NE as Qualified Transmission Project Sponsors as of the date the revisions to this Appendix 3 were filed with the Commission. The most current list of entities approved as Qualified Transmission Project Sponsors is available on the ISO-NE website. This Appendix 3 will be updated to reflect any subsequent enrollments as part of unrelated OATT filings at the time ISO-NE undertakes such unrelated filings.

Braintree Electric Light Department

Central Maine Power Company

City of Holyoke Gas and Electric Department

The Connecticut Light and Power Company

The Connecticut Transmission Municipal Electric Cooperative

Emera Maine

Eversource Energy Transmission Ventures, Inc.

Grid America Holdings, Inc.

Hudson Light and Power Department

Maine Electric Power Company

Middleboro Gas & Electric Department

New England Energy Connection, LLC

New England Power Company

New Hampshire Transmission, LLC

Norwood Municipal Light Department

NSTAR Electric Company

Public Service Company of New Hampshire

Taunton Municipal Light Plant

United Illuminating Company



Vermont Transco, LLC

Western Massachusetts Electric Company

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

**ISO New England Inc.**  
**New England Power Pool**

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**Docket No. ER23-\_\_\_\_-000**

**PREPARED TESTIMONY OF MR. STEVEN L. JUDD  
ON BEHALF OF ISO NEW ENGLAND INC.**

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

**A:** My name is name is Steven L. Judd. I am Manager of Resource Adequacy & Accreditation with ISO New England Inc. ( "ISO"). My business address is One Sullivan Road, Holyoke, Massachusetts 01040-2841.

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

**A:** I have a Bachelor of Science degree in Electrical Engineering and a Master of Science degree in Electrical and Computer Engineering with a focus in Power Systems from the University of Illinois at Urbana-Champaign. I also have a Master of Business Administration from Western New England University in Springfield, MA, and I am a registered Professional Engineer in the Commonwealth of Massachusetts. In my current position of Manager, Resource Adequacy & Accreditation, which I have held since December 2022, I oversee the process to develop the capacity requirements and resource accreditations for our Forward Capacity Market. I recently was the Supervisor of the ISO's Special Studies and Interregional Planning group which oversaw the Needs Assessments

1 for Economic Study process under the ISO Open Access Transmission Tariff.<sup>1</sup> I originally  
2 joined the ISO in 2008 as an Associate Engineer in Transmission Planning until 2013 when  
3 I left for Burns & McDonnell consulting firm to work as a Senior Engineer, then Project  
4 Manager in their Business Technology and Solutions department working on power system  
5 planning projects for dozens of clients across the US and world. I returned to the ISO in  
6 2017 as a Lead Engineer in System Planning performing special projects and interregional  
7 planning for the department before becoming Supervisor of Economic Studies in 2021 and  
8 now Manager, Resource Adequacy & Accreditation in 2022. I have over 15 years of  
9 experience regarding the operation and planning of the New England bulk power system  
10 and various systems across the country from my consulting work.

11  
12 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

13 **A:** The purpose of my testimony is to explain the ISO's proposed revisions to the Tariff to  
14 incorporate rules that require the ISO conduct defined scenario-based studies designed to:  
15 (1) identify market efficiency issues, and as applicable, market efficiency needs on the Pool  
16 Transmission Facilities ("PTF")<sup>2</sup> portion of the New England Transmission System in a  
17 dedicated scenario as part of the Economic Study process; (2) provide the New England  
18 region more insight into system trends and consistent analysis; and (3) facilitate  
19 comparison across Economic Study cycles, all of which can inform future decisions in

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<sup>1</sup> Capitalized terms used but not otherwise defined in this filing have the meanings ascribed thereto in the ISO's Transmission, Markets and Services Tariff ("Tariff"). Section II of the Tariff contains the Open Access Transmission Tariff ("OATT"). Section III of the Tariff contains the ISO's market rules ("Market Rule 1").

<sup>2</sup> See Tariff at Section I.2.2 (defining PTF as "the transmission facilities owned by PTOs which meet the criteria specified in Section II.49 of the OATT"); see also OATT at Section II.49.

1 transmission investment. In my testimony, I refer to the proposed Tariff revisions,  
2 collectively, as the “Economic Study Revisions.” The Economic Study Revisions  
3 comprise: (1) the addition of new Section 17 to Attachment K, which replaces the current  
4 Economic Study process in Section 4.1(b) and includes new defined reference scenarios,  
5 which are the Benchmark Scenario, Market Efficiency Needs Scenario, Policy Scenario,  
6 and Stakeholder-Requested Scenario, and procedures for implementing the Economic  
7 Study process; (2) conforming revisions to Section I.1.2 of the Tariff and Attachment K.

8 The remainder of my testimony is organized as follows. After explaining the current  
9 Economic Study process and why the Economic Study Revisions are being made at this  
10 time, I discuss the substantive and procedural revisions to the Economic Study process  
11 proposed in this filing and associated benefits thereof. Beginning with the substantive  
12 revisions, I describe four defined reference scenarios the ISO is proposing to add to the  
13 Economic Study process, which the ISO will evaluate each study cycle. Next I detail the  
14 procedural revisions to the Economic Study process, such as modifications to the duration  
15 of the Economic Study process, mechanism to initiate the process, and mechanism for  
16 stakeholders to request and select reference scenarios and alternative sensitivities for the  
17 four defined reference scenarios for informational purposes.

18  
19 **Q: WHY ARE THE ECONOMIC STUDY REVISIONS BEING MADE AT THIS**  
20 **TIME?**

21 **A:** The Economic Study Revisions are the result of the first phase of a bifurcated effort to  
22 improve the Economic Study process. The Economic Study Revisions being filed with the  
23 Federal Energy Regulatory Commission (“Commission”) at this time seek to improve

1 identified shortcomings in the Economic Study process. Specifically, the proposed  
2 revisions focus on improving the process by providing an analysis framework that could  
3 be used by the region to evaluate preparedness as the region transitions to clean energy.  
4 Under the new framework, the ISO proposes to provide study assumptions that are aligned  
5 with those used in other studies performed in system planning, and allow for open  
6 stakeholder review, input, and discussion of those assumptions prior to running  
7 simulations. The framework will facilitate running consistent reference scenarios in the  
8 future with the most recent projects and policies, which should enable more insight into  
9 the system trends, and should aid stakeholders in requesting sensitivities based on those  
10 trends. The next phase of the effort, which is currently underway with a goal of submitting  
11 a Tariff filing by the second quarter of 2024, will review and update the factors and metrics  
12 used to identify market efficiency issues and needs of the power system.

13  
14 **Q: PLEASE DESCRIBE THE SHORTCOMINGS THAT HAVE BEEN IDENTIFIED**  
15 **IN THE ECONOMIC STUDY PROCESS.**

16 **A:** Since the adoption of the Economic Study process approximately fifteen years ago, the  
17 ISO conducted fifteen Economic Studies (some years with multiple studies and a few years  
18 with no requests). These studies have provided the region a wealth of information, but  
19 have also brought to light shortcomings in the Economic Study process. First, in the  
20 approximately fifteen years the Economic Study process in Attachment K has been  
21 effective, the process has resulted in only one Needs Assessment to identify market  
22 efficiency needs and has not produced any Market Efficiency Transmission Upgrades.

1 As stated above, stakeholders may request Economic Studies for informational purposes  
2 without requesting that the ISO conduct a Needs Assessment. The vast majority of  
3 stakeholder-requested Economic Studies performed thus far were for informational  
4 purposes to inform potential policy or investment decisions, such as those to integrate new  
5 resources and load. These studies evaluated hypothetical scenarios with study horizons in  
6 the distant future and are based on assumptions provided by the stakeholders requesting  
7 the Economic Studies, which may or may not be applicable to the entire region. As a result,  
8 the Economic Study process has not resulted in the consistent analysis of the New England  
9 Transmission System on system-wide basis to identify market efficiency needs and  
10 upgrades on consistent basis. Stakeholders have expressed interest in moving beyond the  
11 current studies' framework to allow for Economic Studies that result in both informational  
12 and actionable study results (*i.e.*, Economic Studies that result in Market Efficiency  
13 Transmission Upgrades).

14 Second, variability in the size and scope of Economic Study requests, with some narrowly-  
15 scoped (*e.g.*, the 2019 Economic Study examined the effectiveness of transmission  
16 upgrades to Orrington South to increase production from constrained onshore renewables  
17 in Maine) and others broadly-scoped (*e.g.*, the 2021 Economic Study to examined potential  
18 reliability gaps in operating the New England system in the year 2040 with more variable  
19 energy resources and increased electrification of the overall economy) leads to overlapping  
20 studies, which prevents the ISO from incorporating results and lessons learned from  
21 previous Economic Studies into current Economic Studies. Under the current timeline to  
22 complete Economic Studies, the ISO selects an Economic Study in June, which leaves only  
23 six months to scope, analyze, and complete the study if the ISO were to do so in the same

1 year it was initiated. Economic Studies with larger scopes have taken approximately 18 to  
2 24 months to complete, and in some cases longer. As a result, the following year's studies  
3 starts before previous study requests are completed and results and lessons learned from  
4 previous studies are unable to influence or be applied to the next study.

5 Third, variability in the scope and modeling assumptions (*e.g.*, study period, resource mix,  
6 load, etc.) of the Economic Studies hinders comparison between Economic Studies and, as  
7 a result, the identification of system trends between Economic Study cycles. Moreover,  
8 the variability in scope and modeling assumptions has impacted the ability of the ISO to  
9 coordinate with, or model, neighboring systems that are not planning the system based on  
10 the same assumptions as those in the Economic Studies. For example, in 2021, the ISO  
11 initiated a study to examine potential reliability gaps in operating the New England system  
12 in the year 2040 that may be caused by more variable energy resources and increased  
13 electrification of the overall economy. At the time the study began, models for neighboring  
14 regions with similar base assumptions, such as assumptions related to the year of study or  
15 the degree of planned variable energy resources and load electrification, did not exist. As  
16 a result, the ISO had to make its own modeling assumptions for neighboring regions that  
17 were not aligned with the planning decisions, models, and assumptions ultimately made by  
18 those regions. The Economic Study Revisions proposed herein will ease the ISO's ability  
19 to model neighboring regions more accurately because there will be a clear and consistent  
20 idea of the year(s) of study and assumptions.

1 **Q: DO THE ECONOMIC STUDY REVISIONS ADDRESS THESE**  
2 **SHORTCOMINGS?**

3 **A:** Yes, the procedural revisions and addition of the defined scenarios proposed in the  
4 Economic Study Revisions address the identified shortcoming by incorporating defined  
5 scenarios that: (1) identify market efficiency issues, and as applicable, market efficiency  
6 needs on PTF portion of the New England Transmission System in a dedicated scenario as  
7 part of the Economic Study process; (2) provide sufficient consistency between Economic  
8 Studies to incorporate lessons learned and identify system trends; (3) increase alignment  
9 with the other ISO system planning processes and modeling of neighboring regions, and;  
10 (4) continue to provide stakeholders with the flexibility to request a scenario and a broad  
11 range of sensitivities for informational purposes. The defined reference scenarios are the:  
12 (1) Benchmark Scenario; (2) Market Efficiency Needs Scenario; (3) Policy Scenario; and  
13 (4) Stakeholder-Requested Scenario.

14 The Benchmark Scenario will be the initial reference scenario studied in a given Economic  
15 Study cycle. This scenario will be used to improve the Economic Study planning model  
16 and associated planning assumptions used in the other three reference scenarios proposed  
17 in this filing by comparing the Benchmark Scenario against the historical performance of  
18 the system in the previous year and adjusting the assumptions and model accordingly. The  
19 Market Efficiency Needs Scenario will be a reference scenario used to identify market  
20 efficiency issues and, as applicable, market efficiency needs on the New England  
21 Transmission System. The Policy Scenario will be used for informational purposes to  
22 identify any potential system efficiency issues resulting from New England and other  
23 energy policies and goals (*e.g.*, federal and state legislation, utility renewable portfolio



1 standard targets, etc.). The Stakeholder-Requested Scenario will be a reference scenario  
2 used to study a stakeholder-requested scenario with region-wide scope not covered by the  
3 other three defined references scenarios.

4 Additionally, following the initial analyses and presentation of results for each defined  
5 reference scenario, stakeholders may request that the ISO study additional sensitivities to  
6 test the effect of a specific change to input assumptions (*e.g.*, the resource mix,  
7 transmission topology, cost assumptions, etc.). These stakeholder-requested sensitivities,  
8 along with the Stakeholder-Requested Scenario, accommodate the addition of the other  
9 three defined reference scenarios to Attachment K while also continuing to provide  
10 stakeholders and the ISO with mechanisms to, respectively, request and study stakeholder-  
11 requested scenarios in the Economic Study process.

12 The ISO is also proposing procedural revisions designed to improve the process for  
13 Economic Studies. For example, to avoid the overlapping studies, the proposed changes  
14 extend the duration of the study period for Economic Studies to provide sufficient time for  
15 the ISO to complete each Economic Study cycle before the subsequent cycle starts. This  
16 will allow the results of one study cycle to inform and be used as an input for the next  
17 Economic Study cycle and provide sufficient time to perform any possible requests for  
18 proposal to solve market efficiency needs identified in the market efficiency Needs  
19 Assessment.

20 Collectively, the proposed procedural revisions and the addition of defined scenarios to the  
21 Economic Study process will provide more insight into system trends, ensure consistent  
22 analysis, and facilitate comparison between the Economic Studies in subsequent cycles, all

of which can further inform future decisions in transmission investment. These improvements could also facilitate the region's clean energy transition: the new construct will consistently produce results that could aid the states with the implications of public policy developments and inform future decisions in transmission investment. For example, the Policy Scenario accounts for New England states' policies, among others, which can help inform states' decisions regarding the magnitude of economic benefits that could be gained from transmission expansion to, by way of example, allow more renewables to flow and reduce system congestion. The Economic Study Revisions further support the transition by providing an analysis framework that could be used by the region to evaluate preparedness as the region transitions to renewable energy. Specifically, the Economic Study Revisions provide a repeatable framework to assess the impact of the clean energy transition and the changing system needs over time.

**Q: PLEASE DESCRIBE THE CURRENT ECONOMIC STUDY PROCESS**

**A:** Presently, the Economic Study provisions of the ISO-NE OATT allow stakeholders to request—and collectively identify, and prioritize in consultation with the ISO—Economic Studies for ISO-NE to conduct in a given year to evaluate and, as applicable, address market inefficiencies, congestion constraints, or integrate new resources or load. Specifically, the ISO's stakeholders may request the ISO to undertake assessments of the PTF portion of the New England Transmission System on a system wide or specific area basis to examine situations where potential regulated transmission solutions or market responses or investments could result in: (i) a net reduction in total production cost to supply system load based on the factors specified in Attachment N of the OATT; (ii)

1 reduced congestion; or (iii) the integration of new resources or loads, or both, on an  
2 aggregate or regional basis. The results of the Economic Studies allow stakeholders to  
3 assess the impact of proposed system expansions or resource alternatives for either  
4 informational purposes or for the ISO to identify and address market efficiency needs with  
5 a Market Efficiency Transmission Upgrade that will be included in the Regional System  
6 Plan and RSP Project List.

7 To initiate the Economic Study process, stakeholders must submit their requests for  
8 Economic Studies to be conducted by ISO-NE by April 1 each year. The ISO may also  
9 propose its own Economic Studies thereafter. If neither the stakeholders nor ISO propose  
10 an Economic Study in a given year, the process ends and no Economic Study will be  
11 initiated that year. However, if an Economic Study is proposed by either the stakeholders  
12 or ISO, the ISO develops a rough work scope and cost estimate for all requested Economic  
13 Studies and prepare preliminary prioritization on the basis of ISO-NE's perceived inter-  
14 area and regional benefits. ISO-NE then submits this information to the Planning Advisory  
15 Committee for its consideration by no later than May 1 and hold a meeting of the Planning  
16 Advisory Committee no later than June 1 to discuss, identify, and prioritize the proposed  
17 Economic Studies. The ISO may perform up to two Economic Studies in a given year  
18 taking into consideration their impact on the ISO budget and other priorities. If a Public  
19 Policy Transmission Study will not be concurrently performed, the ISO may consider  
20 performing up to three Economic Studies.

21 If a Needs Assessment is requested or warranted as part of an Economic Study, ISO-NE  
22 conducts a market efficiency Needs Assessment to identify potential market efficiency  
23 needs. If a Needs Assessment identifies a market efficiency need, the ISO then conducts a

1 two-stage competitive solution process to identify Market Efficiency Transmission  
2 Upgrades. The standard used to identify a Market Efficiency Transmission Upgrade is  
3 whether the upgrade will primarily provide a net reduction in total production cost to  
4 supply system load based on the factors specified in Attachment N of the OATT.  
5 Attachment N also allows for the consideration of additional data provided by stakeholders  
6 (e.g., congestion costs) that ISO-NE, in coordination with the New England stakeholders,  
7 may consider to illustrate the net cost to load with and without the transmission upgrade,  
8 such as locational installed capacity, congestion costs, and impacts on bilateral prices for  
9 electricity. A Market Efficiency Transmission Upgrade ultimately selected to address a  
10 market efficiency need is included in the Regional System Plan.

11 The ISO's costs to perform Economic Studies are recovered by the ISO as part of the  
12 OATT-related services. The ISO also performs additional Economic Studies requested by  
13 one or more stakeholders beyond the two to three Economic Studies selected by ISO-NE  
14 and Planning Advisory Committee. However, the stakeholders requesting these additional  
15 studies are responsible for paying for the costs of such studies.

16  
17 **Q: HOW WILL THE ECONOMIC STUDY PROCESS BE USED, AND WHAT ARE**  
18 **THE DEFINED REFERENCE SCENARIOS BEING PROPOSED UNDER THE**  
19 **ECONOMIC STUDY REVISIONS?**

20 **A:** As described in new Section 17.1, the Economic Study process will be used to identify  
21 market efficiency issues on the PTF portion of the New England Transmission System and,  
22 as applicable, evaluate competitive solutions to alleviate identified market efficiency  
23 needs. The process will also provide information to facilitate the evaluation of economic

1 and environmental impacts of New England regional policies, federal policies, and various  
2 resource technologies on satisfying future resource needs in the region.

3 In consultation with the Planning Advisory Committee, the ISO will develop and study the  
4 following four reference scenarios described in new Section 17.2 of Attachment K: the  
5 Benchmark Scenario, Market Efficiency Needs Scenario, Policy Scenario, and  
6 Stakeholder-Requested Scenario. The Benchmark Scenario will be the initial reference  
7 scenario studied in a given Economic Study cycle. It will be used to improve the Economic  
8 Study planning model and associated planning assumptions used in the other three  
9 reference scenarios (*i.e.*, Market Efficiency Needs Scenario, Policy Scenario, and  
10 Stakeholder-Requested Scenario) proposed in this filing by comparing the Benchmark  
11 Scenario against the historical performance of the system in the previous year and adjusting  
12 the assumptions and model accordingly. The Benchmark Scenario will use the existing  
13 base case model, historical base case data, and historical observations and performance of  
14 the system from the prior year to the beginning of the applicable Economic Study cycle to  
15 identify any modeling issues in the base set of input data. The model and assumptions used  
16 for the Market Efficiency Needs Scenario and Policy Scenario will be adjusted accordingly  
17 based on the study results of the Benchmark Scenario.

18 The purpose of the Market Efficiency Needs Scenario is to incorporate a defined reference  
19 scenario into the Economic Study process that will be used each study cycle to identify  
20 market efficiency issues and, as applicable, market efficiency needs on the PTF portion of  
21 the New England Transmission System (*i.e.*, on a system-wide basis). Unlike the Policy  
22 Scenario and Stakeholder-Requested Scenario, which are used for informational purposes  
23 to study the effects of policies and stakeholder-requested scenarios that may or may not

1 come to fruition, only the Market Efficiency Needs Scenario identifies market efficiency  
2 issues and, as applicable, market efficiency needs based on planned and forecasted system  
3 topology, configurations, and system conditions similar to other system planning models  
4 used in Needs Assessments. The model used for the Market Efficiency Needs Scenario  
5 will be the updated base case from the Benchmark Scenario and forecasted out to the ten-  
6 year planning horizon year using assumptions and criteria in Section 4.1(f) of Attachment  
7 K. The study year shall be year N+10 and the simulation length shall be one year for the  
8 Market Efficiency Needs Scenario.

9 The ISO will use the Market Efficiency Needs Scenario and criteria in Attachment N to  
10 identify market efficiency needs on the PTF portion of the New England Transmission  
11 System pursuant to a Needs Assessment. All of the market efficiency issues and associated  
12 benefits of relieving those issues will be documented in a market efficiency Needs  
13 Assessment conducted pursuant to Section 4.1 of Attachment K. Any market efficiency  
14 issues that meet the criteria in Attachment N will be identified as market efficiency needs,  
15 and a request for proposal or multiple requests for proposals will be issued to initiate the  
16 competitive solution process for Market Efficiency Transmission Upgrades to address the  
17 identified market efficiency need or needs pursuant to Section 4.3 of Attachment K.

18 The purpose of the Policy Scenario is to identify any potential market efficiency issues  
19 resulting from the New England states' energy policies and goals, among others (*e.g.*,  
20 federal legislation, state legislation, or utility renewable portfolio standard targets), for  
21 informational purposes. The policies and goals selected for the Policy Scenario shall be  
22 selected by the ISO and reviewed by the Planning Advisory Committee pursuant to new  
23 Section 17.4 of Attachment K. The model used for the Policy Scenario will be the base

1 case model resulting from the Benchmark Scenario and forecasted out to the applicable  
2 year when relevant New England policies and goals, and other applicable energy policies  
3 and goals, are in full effect. The study year for the Policy Scenario will be dependent on  
4 deadlines for achieving the New England region and other energy policies and goals.  
5 However, the study year will be at least ten years into the future and cover the deadlines  
6 for achieving all applicable goals and policies. The study simulation length for the Policy  
7 Scenario will be one year. The Policy Scenario will help inform states' decisions regarding  
8 the magnitude of economic benefits that could be gained from transmission expansion, for  
9 example, to allow more renewables to flow and reduce system congestion.

10 The Stakeholder-Requested Scenario will be a reference scenario used for informational  
11 purposes to study a scenario requested by stakeholders with region-wide scope that is not  
12 already covered by the other three reference scenarios described earlier. The model used  
13 for the Stakeholder-Requested Scenario shall be the base case model resulting from the  
14 Benchmark Scenario and then forecasted out to a year with assumptions requested by the  
15 stakeholders and agreed upon by the ISO. The study year shall be dependent on the  
16 requested scenario and the simulation length shall be one year. Similar to the Policy  
17 Scenario, the results of the Stakeholder-Requested Scenario will be for informational  
18 purposes only. This scenario, along with the other reference scenarios proposed in the  
19 Economic Study Revisions, will provide the region more insight into system trends,  
20 consistent analysis, and facilitate comparison, all of which can further inform future  
21 decisions in transmission investment.

1 **Q: WHAT ARE THE ECONOMIC STUDY REVISIONS TO EFFECTUATE THE**  
2 **DEFINED REFERENCE SCENARIOS?**

3 **A:** The Economic Study Revisions incorporate the defined reference scenarios in new Sections  
4 17.2, 17.5, and 17.6 of Attachment K.

6 **Q: WHAT ARE THE PROCEDURAL REVISIONS BEING PROPOSED UNDER THE**  
7 **ECONOMIC STUDY REVISIONS?**

8 **A:** Under the Economic Study Revisions, the Economic Study process will be conducted at  
9 least once every three years and at most once every two years. The process will be initiated  
10 for the first time in January 2024. Rather than wait for stakeholders to request an Economic  
11 Study to initiate the process, the ISO will actively initiate the process each study cycle.  
12 This will not hinder the ability of stakeholders to request studies to identify those portions  
13 of the transmission system where they believe upgrades and other investments may be  
14 necessary to reduce congestion and to integrate new resources. After the ISO initiates the  
15 Economic Study process, the ISO will actively solicit the input of stakeholders through  
16 Planning Advisory Committee to determine the Stakeholder-Requested Scenario and, for  
17 each defined reference scenario, additional sensitivities.

18 While a stakeholder request for the ISO to conduct Economic Studies will no longer trigger  
19 the initiation of the Economic Study process, the Economic Study Revisions will not hinder  
20 stakeholders' ability to request that the ISO study a specific scenario or sensitivities (i.e.,  
21 stakeholders are not losing the ability to request a specific scenario or sensitivities).  
22 Stakeholders may still request—and collectively identify and prioritize with the ISO—  
23 analysis beyond the Benchmark Scenario, Market Efficiency Needs Scenario, and the



1 Policy Scenario to address market inefficiencies, congestion constraints, or integrate new  
2 resources or load. Moreover, following the initial analyses and presentation of results for  
3 each defined reference scenario, stakeholders may request, and the ISO may propose,  
4 additional sensitivities be applied to a reference scenario and studied to test the effect of a  
5 specific change to input assumptions (e.g., the resource mix, transmission topology, cost  
6 assumptions, etc.). Furthermore, an individual stakeholder may still request that the ISO  
7 conduct individual Economic Studies at the stakeholder's own expense to examine  
8 situations where potential regulated transmission solutions, market responses, or  
9 investments could result in (i) a net reduction in total production cost to supply system load  
10 based on the factors specified in Attachment N of this OATT, (ii) reduced congestion, or  
11 (iii) the integration of new resources or loads, or both, on an aggregate or regional basis.

12 To initiate the Economic Study cycle, the ISO will provide the Planning Advisory  
13 Committee with notice that the ISO is initiating the process for the Economic Study cycle.  
14 Within three months of initiating the process, the ISO will provide the Planning Advisory  
15 Committee the schedule for the Economic Study cycle. The schedule will include dates  
16 for the ISO's collection, and stakeholders' submission, of data to be used in the studies, the  
17 preparation of models, the completion of studies, and the issuance of study results. The  
18 schedule will also include a one-month period for stakeholders to submit proposals for the  
19 Stakeholder-Requested Scenario. If the Economic Study cycle and potential resulting  
20 competitive request for proposals process cannot be completed within the initial schedule,  
21 the ISO will notify stakeholders of such, provide a revised estimated completion date, and  
22 provide an explanation of the reason or reasons why the additional time is required.

1 After initiating the process, the ISO will prepare and post on its website a proposed scope  
2 for the defined reference scenarios, and the associated parameters and assumptions. The  
3 ISO will either provide the Planning Advisory Committee with notice that the ISO posted  
4 the information or send the information itself to the Planning Advisory Committee after it  
5 is posted. After the notice or information is sent to the Planning Advisory Committee, a  
6 Planning Advisory Committee meeting will be held to solicit stakeholder input for  
7 consideration by the ISO on the study's scope, parameters, and assumptions.

8 Following the analyses and presentation of the results of the Economic Study defined  
9 reference scenarios, stakeholders may request, and the ISO may propose, additional  
10 sensitivities to test the effect of a specific change to input assumptions. The sensitivities  
11 will be limited to a single theme or category of changes to allow for better understanding  
12 of the causal effect of the change to the results. The ISO will then prioritize and list the  
13 sensitivities that can be completed during the Economic Study cycle taking into  
14 consideration the impact of the additional efforts on the ISO resources and other priorities.  
15 Results from studies conducted with stakeholder-requested scenario sensitivities will be  
16 used for informational purposes only (i.e., any identified market efficiency issues resulting  
17 from a study with a stakeholder-requested scenario sensitivity cannot be evaluated as a  
18 market efficiency need against the factors and metrics in Attachment N), which  
19 stakeholders or the ISO can use to inform and evaluate potential upgrades or other  
20 investments that could reduce congestion or integrate new resources and loads on an  
21 aggregated or regional basis. In addition to the Stakeholder-Requested Scenario, the ability  
22 of stakeholders to request, and the ISO to study, additional sensitivities provides stakeholders  
23 with another opportunity to have the ISO study and test the effect of specific changes to

1 the system, such as a different resource mix, transmission topology, cost assumptions, etc.,  
2 beyond those in the defined scenarios.

3  
4 **Q: WHAT ARE THE ECONOMIC STUDY REVISIONS TO EFFECTUATE THE**  
5 **PROCEDURAL REVISIONS BEING PROPOSED UNDER THE ECONOMIC**  
6 **STUDY REVISIONS?**

7 **A:** The Economic Study Revisions incorporate the defined reference scenarios in new Sections  
8 17.1, 17.3, 17.4, 17.7, and 17.8 of Attachment K.

9  
10 **Q: IN YOUR OPINION, DO THE ECONOMIC STUDY REVISIONS CONTINUE TO**  
11 **MEET THE PREMISE FOR THIS PLANNING CONSTRUCT?**

12 **A:** In my opinion, the Economic Study Revisions further enhance the Order No. 890 construct  
13 by providing a mechanism by which stakeholders can receive a wide-range of analyses that  
14 can be used to advance market efficiency transmission planning and inform policy  
15 decision. Collectively, the proposed procedural revisions and the addition of defined  
16 scenarios to the Economic Study process will provide more insight into system trends,  
17 ensure consistent analysis, and facilitate comparison between the Economic Studies in  
18 subsequent cycles, all of which can further inform future decisions in transmission  
19 investment.

20  
21 **Q: DOES THIS CONCLUDE YOUR TESTIMONY?**

22 **A:** Yes.

1 I declare that the foregoing is true and correct.

2

3 Executed on 1/27/23

4

5

6

A handwritten signature in blue ink, appearing to read "Stu Judd", is written over a horizontal line.

7

Steven L. Judd

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