



June 21, 2013

#### BY ELECTRONIC FILING

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

RE: ISO New England Inc. and New England Power Pool, Docket No. ER13000, Market Rule 1 Clarifications to the Full Integration Rules for PriceResponsive Demand and Revisions to Address the Treatment of Net Supply

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act ("Section 205"), <sup>1</sup> ISO New England Inc. (the "ISO"), joined by the New England Power Pool ("NEPOOL") Participants Committee<sup>2</sup> (together, the "Filing Parties"), <sup>3</sup> hereby electronically submits this transmittal letter and revised Tariff sections to address two sets of revisions to the full integration market rules for price-responsive demand: (1) a series of rule changes that are not intended to change the design of the fully-integrated price-responsive demand rules, but rather to clarify the rules and make several minor clean-up changes to better reflect the design intent of the price-responsive demand rules under full integration (the "PRD FI Changes"), and (2) rules to address the treatment in the Forward Capacity Market of Demand Resources that can produce "net supply" (*i.e.*, the injection of energy into the electrical grid) (the "Net Supply Revisions"). The ISO also submits herewith the supporting testimony of Henry Y. Yoshimura and Christopher A. Parent, which is

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

<sup>&</sup>lt;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 (the "Tariff"), the Second Restated New England Power Pool Agreement, and the Participants Agreement. Market Rule 1 is Section III of the Tariff.

<sup>&</sup>lt;sup>3</sup> Under New England's RTO arrangements, the rights to make this filing of changes to Market Rule 1 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.

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sponsored solely by the ISO.<sup>4</sup> The "Yoshimura-Parent PRD Testimony" addresses the PRD FI Changes, and the "Yoshimura-Parent Net Supply Testimony" addresses the Net Supply Revisions.

The Filing Parties request the Commission accept the PRD FI Changes and the Net Supply Revisions to be effective on August 21, 2013.

## I. INTRODUCTION

The ISO and stakeholders have been working on a number of rule changes involving price-responsive demand over the past several years. The filings associated with these efforts are discussed below.

In August 2011, the ISO filed two sets of tariff revisions in compliance with Order No. 745, Demand Response Compensation in Organized Wholesale Energy Markets. The ISO's compliance filing for Order No. 745 proposed implementing PRD in two stages: rules defining how a demand response resource participates in the New England energy market during an initial "transition period," (referred to herein as the "PRD TP" rules) and integrated rules, which are designed to fully integrate demand response resources into the energy market and will replace the transition period rules starting in June 2017 (referred to herein as the "PRD FI" rules).

Subsequent to the August 19, 2011 Filing of the PRD TP and PRD FI rules, three additional filings were submitted to address further changes for PRD FI. On January 31, 2012, the ISO, joined by the NEPOOL Participants Committee, filed conforming changes to the Forward Capacity Market rules, to conform those rules to the PRD TP rules. On April 13, 2012, the ISO, joined by the NEPOOL Participants Committee, filed a series of clarifying changes to the PRD TP rules and the Forward Capacity Market rules. All three sets of PRD TP rules (*i.e.*, the transition period rules filed in the August 19, 2011 Filing, the conforming Forward Capacity Market rule modifications filed in the January

<sup>&</sup>lt;sup>4</sup> Mr. Yoshimura is the Director of Demand Resource Strategy for the ISO. Mr. Parent is the Manager of Market Development for the ISO.

<sup>&</sup>lt;sup>5</sup> ISO New England Inc., Order No. 745 Compliance Filing, Docket Nos. ER11- 4336-000 and ER11-4336-001 (filed August 19, 2011) (the "August 19, 2011 Filing").

<sup>&</sup>lt;sup>6</sup> Demand Response Compensation in Organized Wholesale Energy Markets, Order No. 745, 76 Fed. Reg. 16,658 (Mar. 15, 2011), FERC Stats. & Regs. ¶ 31,322, order on reh'g and clarification, Order No. 745-A, 137 FERC ¶ 61,215 (2011).

<sup>&</sup>lt;sup>7</sup> *ISO New England Inc. and New England Power Pool*, Price Responsive Demand FCM Conforming Changes, Docket No. ER12-947-000 (filed January 31, 2012) (the "January 31, 2012 Filing").

<sup>&</sup>lt;sup>8</sup> ISO New England Inc. and New England Power Pool, Market Rule 1 Clarifications to the Transition Period Rules for Price-Responsive Demand, Docket No. ER12-1550-000 (filed April 13, 2012) (the "April 13, 2012 Filing").

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31, 2012 Filing, and the clarifications filed in the April 13, 2012 Filing) became effective June 1, 2012.

The ISO has also made a number of filings pertaining to the PRD FI rules. In December 2011, the ISO filed a request to move the effective date for the start of PRD FI, which was initially requested to take effect in June 2015, to June 2016. This request was granted by the Commission. On April 26, 2012, the ISO filed a series of revisions to conform the Forward Capacity Market rules to the PRD FI rules, and in the same filing requested that the effective date for PRD FI be pushed back another year to June 2017. The Commission accepted the large majority of the conforming changes from the April 26, 2012 Filing, including the request for a June 2017 effective date for PRD FI, subject to the ISO making a compliance filing to provide additional explanation on some of the revisions. However, the Commission rejected the ISO's proposed treatment of net supply in the Forward Capacity Market, "without prejudice to ISO-NE filing revised Tariff language to clarify its rules regarding demand response resources that provide capacity through both demand reductions and behind-the-meter generation." 14

The Filing Parties are now proposing in this filing two additional sets of changes to the PRD FI rules:

• The PRD FI Changes clarify the baseline calculation rules in Section III.8, the energy market rules for demand response in Appendix III.E, the Forward Capacity Market rules for demand response in Section III.13, and applicable definitions in Section I.2.2. These revisions also propose a change to the effective dates of rules that have already been accepted by the Commission. The proposed change in effective dates does not change the start date for PRD FI, but rather

<sup>&</sup>lt;sup>9</sup> See ISO New England Inc., Order on Compliance Filing, 138 FERC ¶ 61,042 (2012) ("January 19, 2012 Order"); ISO New England Inc. and New England Power Pool Participants Committee, Letter order Accepting Price-Responsive Demand FCM Conforming Changes, Docket No. ER12-947-000 (issued April 17, 2012); ISO New England Inc. and New England Power Pool Participants Committee, Letter Order Accepting Clarifications to the Transition Period Rules for Price Responsive Demand, Docket No. ER12-1550-000 (issued May 29, 2012).

<sup>&</sup>lt;sup>10</sup> ISO New England Inc., Effective Date Change for "Fully Integrated" Demand Response Rules, Docket No. ER11-4336-003, (December 22, 2011) ("December 22, 2011 Filing").

<sup>&</sup>lt;sup>11</sup> January 19, 2012 Order (granting June 1, 2016 effective date for fully integrated PRD rules).

<sup>&</sup>lt;sup>12</sup> ISO New England Inc., Market Rule 1 Price Responsive Demand FCM Conforming Changes for Full Integration, Docket No. ER12-1627-000, (April 26, 2012) ("April 26, 2012 Filing").

<sup>&</sup>lt;sup>13</sup> *ISO New England Inc.*, Order on Proposed Tariff Revisions, 142 FERC ¶ 61,027 (2013) ("January 14, 2013 Order"). On January 15, 2013, the Commission issued an Errata Notice that deleted Paragraph 32 in its entirety and corrected Paragraph 33. All references to the January 14 Order are to the corrected version.

<sup>&</sup>lt;sup>14</sup> January 14, 2013 Order at P 43.

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would make effective in 61 days rules that will be utilized for PRD FI when it begins in June 2017. As discussed in more detail below, this change to the effective date will allow those preparing to participate in the Forward Capacity Market for the 2017-2018 Capacity Commitment Period to have available in one place the full set of rules explaining the obligations to which they will be subject during the performance period.

The Net Supply Revisions address how a Demand Response Capacity Resource participates in the Forward Capacity Market when a portion of the resource provides capacity by delivering net supply. The proposed treatment of net supply filed herewith is significantly different from the treatment proposed in the April 26, 2012 Filing, which was rejected by the Commission. Unlike the proposed changes in the April 26, 2012 Filing, the Net Supply Revisions do *not* require the Market Participant to register in the Forward Capacity Market two resources in order to receive full credit for the capacity associated with net supply. Rather, the capacity associated with net supply will be credited directly to the Demand Response Capacity Resource with which the Demand Response Asset is associated. Therefore, the capacity provided by the net supply participates in the Forward Capacity Market as part of a Demand Resource, rather than as its own, separate, generation resource. This approach addresses concerns raised by certain participants, in the context of the April 26, 2012 Filing, that dividing the capacity of a Demand Resource that could generate net supply between two separate resources would be very challenging to accomplish under the forward nature of the capacity market and might result in under-counting the capacity value of the entire resource.

# II. REQUESTED EFFECTIVE DATE

The Filing Parties request that the Commission accept the PRD FI Changes and the Net Supply Revisions as filed, without suspension or hearing, to be effective on August 21, 2013, which is 61 days from the date of this filing.<sup>15</sup>

## III. DESCRIPTION OF THE FILING PARTIES; COMMUNICATIONS

The ISO is the 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 with the New England Participating Transmission Owners. 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 operate the system according to reliability standards established by the Northeast

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<sup>&</sup>lt;sup>15</sup> 18 C.F.R. § 35.3 (2012).

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Power Coordinating Council ("NPCC") and the North American Electric Reliability Council ("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 430 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, demand resource providers, developers and a merchant transmission provider. Pursuant to revised governance provisions accepted by the Commission, <sup>16</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."

All correspondence and communications in this proceeding should be addressed to the undersigned for the ISO as follows:

Christopher J. Hamlen, Esq.\* ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841
Tel: (413) 540-4585

Tel: (413) 540-4585 Fax: (413) 535-4379

E-mail: chamlen@iso-ne.com

#### And to NEPOOL as follows:

Tom Kaslow\*
Vice-Chair
NEPOOL Markets Committee
c/o GDF SUEZ Energy North America,
Inc.

20 City Square, Third Floor Charlestown, MA 02129 Tel: (617) 886-8715

Fax: (617) 886-8844

E-mail: tom.kaslow@gdfsuezna.com

David T. Doot, Esq.\*

Sebastian M. Lombardi, Esq.\*

Day Pitney LLP 242 Trumbull Street Hartford, CT 06103 Tel: (860) 275-0663 Fay: (860) 881 2493

Fax: (860) 881-2493

Email: dtdoot@daypitney.com slombardi@daypitney.com

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 $<sup>^{16}</sup>$  ISO New England Inc., et al., 109 FERC  $\P$  61,147 (2004).

\*Persons designated for service<sup>17</sup>

## IV. STANDARD OF REVIEW

These changes are being submitted pursuant to Section 205, which "gives a utility the right to file rates and terms for services rendered with its assets." Under Section 205, the Commission "plays 'an essentially passive and reactive role" whereby it "can reject [a filing] only if it finds that the changes proposed by the public utility are not 'just and reasonable." 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." The changes proposed herein "need not be the only reasonable methodology, or even the most accurate." As a result, even if an intervenor or the Commission develops an alternative proposal, the Commission must accept this Section 205 filing if it is just and reasonable.<sup>23</sup>

## V. DESCRIPTION AND RATIONALE FOR THE PRD FI CHANGES

The PRD FI Changes make a number of clarifying revisions to the baseline calculation rules in Section III.8, to the energy market rules for demand response in Appendix III.E, to the Forward Capacity Market rules for demand response in Section III.13, and to applicable definitions in Section I.2.2. These proposed modifications parallel the clarifications that were made to the PRD TP rules in the April 13, 2012 Filing. Like those revisions, the purpose of the PRD FI Changes is to achieve consistency with the market design proposed by the ISO in the August 19, 2011 Filing.<sup>24</sup> Each of the proposed changes, and the rationale for each change, is discussed in greater detail in Mr. Yoshimura and Mr. Parent's supporting testimony on the PRD FI Changes.

<sup>&</sup>lt;sup>17</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>&</sup>lt;sup>18</sup> Atlantic City Elec. Co. v. FERC, 295 F. 3d 1, 9 (D.C. Cir. 2002).

<sup>&</sup>lt;sup>19</sup> *Id.* at 10 (quoting City of Winnfield v. FERC, 744 F.2d 871, 876 (D.C. Cir. 1984)).

<sup>&</sup>lt;sup>20</sup> *Id.* at 9.

<sup>&</sup>lt;sup>21</sup> City of Bethany v. FERC, 727 F.2d 1131, 1136 (D.C. Cir. 1984).

<sup>&</sup>lt;sup>22</sup> Oxy USA, Inc. v. FERC, 64 F.3d 679, 692 (D.C. Cir. 1995).

<sup>&</sup>lt;sup>23</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 Bethany*)).

<sup>&</sup>lt;sup>24</sup> Yoshimura-Parent PRD Testimony at pp 8-9.

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<u>Clarifications for Real-Time Emergency Generation Resource Participation in PRD FI</u>. The PRD FI Changes make several clarifications to the participation of Real-Time Emergency Generation Resources in PRD FI. First, they clarify the metering methodologies that may be used in the Demand Reduction Value calculation for Real-Time Emergency Generation Assets<sup>25</sup> in Section III.13.1.4.3.2<sup>26</sup> and place appropriate limitations on the use of each metering methodology for the Demand Reduction Value calculation based on the make-up of the demand response facility.<sup>27</sup> With these changes, the Demand Reduction Value calculations parallel the calculations in the PRD TP rules.<sup>28</sup>

Further, the PRD FI Changes import existing metering input requirements for Real-Time Emergency Generation Assets, which are currently part of the ISO New England manuals, into Appendix III.E2 of the Tariff.<sup>29</sup> The provisions require that Market Participants with Real-Time Emergency Generation Assets utilize a remote terminal unit for receipt of dispatch instructions, and require that telemetry be communicated in near real-time at an interval of five-minutes or less. The revisions also place accuracy requirements on the metering, and impose periodic testing, auditing and calibration requirements. These requirements are consistent with the existing provisions in place for Real-Time Demand Response Assets for PRD TP under Appendix III.E1.2.<sup>30</sup>

Finally, the PRD FI Changes make a number of conforming changes to the settlement rules for Real-Time Emergency Generation Resources, to reflect in Section III.13.7.2.5.4 the settlement implications of the clarifications to the Demand Reduction Value calculations in Section III.13.1.4.3.2.<sup>31</sup> In addition, since Real-Time Emergency Generation Resources are associated with a Dispatch Zone, Section III.13.7.2.5.4 is being revised to clarify that the Real-Time Locational Marginal Price calculated at the Dispatch Zone will be used to compensate Real-Time Emergency Generation Resources.<sup>32</sup>

<sup>&</sup>lt;sup>25</sup> For a Demand Resource comprising of an aggregation of more than one asset, the Demand Reduction Value of the resource is the sum of the Demand Reduction Values of the individual assets that are part of the resource – thus, the Demand Reduction Value of a Real-Time Emergency Generation Resource is the sum of the Demand Reduction Values of the individual Real-Time Emergency Generation Assets comprising the resource.

<sup>&</sup>lt;sup>26</sup> Yoshimura-Parent PRD Testimony at pp. 10-11 provides a more detailed explanation of this revision.

<sup>&</sup>lt;sup>27</sup> *Id.* at pp. 11-13 provides a more detailed explanation of these revisions.

<sup>&</sup>lt;sup>28</sup> See Section III.13.7.1.5.8.3.1 of Market Rule 1.

<sup>&</sup>lt;sup>29</sup> Yoshimura-Parent PRD Testimony at pp. 13-14.

 $<sup>^{30}</sup>$  *Id*.

<sup>&</sup>lt;sup>31</sup> *Id.* at pp. 14-15 provides a more detailed explanation of these revisions.

 $<sup>^{32}</sup>$  *Id*.

Bring the PRD FI and Associated Baseline Rules Into the Current Tariff. The PRD FI Changes bring the energy market and baseline calculation rules for PRD FI into the current Tariff for use by Market Participants in Forward Capacity Market planning. Appendix III.E to Market Rule 1 contains the energy market rules for price responsive demand. Section III.8 of Market Rule 1 contains the market rules for the Demand Response Baseline calculation. The August 19, 2011 Filing of the price responsive demand rules created two versions of Appendix III.E and Section III.8—one for PRD TP and one for PRD FI—and only the versions for PRD TP are effective at this time. Under the three-year forward looking design of the Forward Capacity Market, Market Participants would benefit by having in one place the energy market performance requirements for future Capacity Commitment Periods for which they are now qualifying and formulating Forward Capacity Auction ("FCA") offers and bids (i.e., FCA8). To facilitate this, the PRD FI Changes make the PRD FI versions of Appendix III.E and Section III.8 effective now (i.e., on the requested effective date for the PRD FI Changes, which is August 21, 2013). With these changes, both the PRD TP versions of Appendix III.E and Section III.8 and the PRD FI versions of Appendix III.E and Section III.8 will be effective. These two sets of versions are labeled Appendix III.E1 and III.E2, and Section III.8A and III.8B, and are annotated to indicate the Capacity Commitment Periods to which each version applies (i.e., the Capacity Commitment Periods during the PRD TP and the Capacity Commitment Periods once PRD FI becomes effective on June 1, 2017).

<u>Clarify the Baseline Calculation Rules for PRD FI</u>. The PRD FI Changes clarify the baseline calculation rules in Section III.8B for PRD FI, so that the rules more clearly explain the calculation methodology. These changes parallel the changes made for PRD TP in the April 13, 2012 Filing. The changes fall into the following categories, and are explained in more detail in the Yoshimura-Parent PRD Testimony.

- 1. The use of meter data in the computation of an asset's Demand Response Baseline when the Demand Response Resource or Real-Time Emergency Generation Resource to which the asset is associated is dispatched;<sup>33</sup>
- 2. The application of the "seven of the prior 10 day" baseline refreshment criterion for assets reducing demand when the Demand Resource to which they are mapped is dispatched;<sup>34</sup>
- 3. The application of the baseline adjustment to Real-Time Emergency Generation Assets interrupting demand in response to a capacity audit or when dispatched during a capacity deficiency;<sup>35</sup> and

 $<sup>^{33}</sup>$  Id. at pp. 17-18 provides additional detail regarding these revisions.

<sup>&</sup>lt;sup>34</sup> *Id.* at pp. 18-20 provides additional detail regarding these revisions.

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4. Clarifying the use of the terms "prior day," "present day" and "next day" in the baseline calculations. <sup>36</sup>

Clarify the Demand Response Baseline and Real-Time Demand Reduction Calculations for Demand Response Assets. Currently, Appendix III.E2.7.3 of the PRD FI energy market rules includes an adjustment "to the metered demand measured at the retail delivery point in the same intervals for purposes of determining: (a) a Demand Response Asset's Demand Response Baseline, and; (b) the real-time demand reduction achieved by the individual end-use customer facility that comprises the Demand Response Asset" when there is a Real-Time Emergency Generation Asset located behind the same Retail Delivery Point as a Demand Response Asset that is being dispatched. This provision is intended to prevent double-counting the same performance on the Demand Response Asset and the Real-Time Emergency Generation Asset.<sup>37</sup> The PRD FI Changes broaden the application of the adjustment so that it applies not only when the generator is dispatched by the ISO but also when the generator is operating for other reasons, such as for a test of the generator or a power outage at the facility, since operation for such other reasons can also impact the accuracy of the baseline and measurement of the demand reduction.<sup>38</sup> The clarifications also move parts of the adjustment to the Demand Response Baseline rules in Section III.8B.

The PRD FI Changes make an analogous modification in Appendix III.E2.7.1 to remove any impact that the Real-Time Emergency Generation Asset's metered output has on the determination of the Real-Time Demand Reduction Obligation of the Demand Response Asset. This helps avoid the potential of improperly counting the same performance on both the Demand Response Asset and the Real-Time Emergency Generation Asset.<sup>39</sup>

Reinstate the Adjustment for Transmission Losses for Demand Resources

Participating in the Forward Capacity Market for PRD FI. Under Sections III.13.7.1.5.1

and III.13.7.1.5.8.3 of the Forward Capacity Market rules, the Demand Reduction Value of a Demand Resource is adjusted to account for the fact that Demand Resources avoid transmission and distribution losses. In the April 26, 2012 Filing on PRD FI, the ISO proposed that the transmission loss adjustment for Demand Resources in the

<sup>(...</sup>continued)

<sup>&</sup>lt;sup>35</sup> *Id.* at pp. 20-22 provides additional detail regarding these revisions. Real-Time Emergency Generation Resources are not dispatched through the energy market, but rather are dispatched in response to a capacity deficiency under ISO New England Operating Procedure No. 4, Action During a Capacity Deficiency.

<sup>&</sup>lt;sup>36</sup> *Id.* at pp. 22-23 for additional detail regarding these revisions.

<sup>&</sup>lt;sup>37</sup> *Id.* at p. 23.

<sup>&</sup>lt;sup>38</sup> *Id.* at pp. 23-24.

<sup>&</sup>lt;sup>39</sup> *Id.* at p. 25.

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Forward Capacity Market be eliminated. This proposal was based on a view that the capacity and energy market models should be the same, and the transmission loss adjustment had been removed for Demand Response Resources as part of the August 19, 2011 Filing for PRD FI. For the reasons explained in the Yoshimura-Parent PRD Testimony, the ISO has determined that it is appropriate to continue applying the adjustment for transmission losses for Demand Resources participating in the capacity market under PRD FI. Accordingly, the PRD FI Changes reinstate the adjustment for transmission losses in Sections III.13.7.1.5.1 and III.13.7.1.5.8.3 with the elimination of the language that excluded the transmission loss adjustment starting in June of 2017.

Clarifications Relating to Demand Reduction Offers and Demand Response Baseline Calculations During Holidays. The PRD FI Changes remove the prohibition on Demand Response Resources offering into the energy market on ISO settlement holidays, because the prohibition is inconsistent with the requirement that Demand Response Capacity Resources with a Capacity Supply Obligation meet their obligation through their associated Demand Response Resources, which must offer their capability into the energy market each day. The changes also define which Demand Response Baseline day-type—i.e., the non-holiday weekday or the Sunday day-type — would be used to establish the Demand Response Baseline on different holidays (e.g., the baseline for Columbus Day is likely to be different than Christmas Day). These revisions are intended to ensure accurate baseline calculations for different types of holidays for which Demand Reduction Offers from Demand Response Capacity Resources with a Capacity Supply Obligation must be submitted. 42

Clarify how Real-Time Demand Response Resources will be Transitioned from PRD TP to PRD FI. The PRD FI Changes explain how Real-Time Demand Response Resources will be transitioned to the new demand response resource categories for PRD FI. As Demand Response Capacity Resources and Demand Response Resources are concepts that will apply for PRD FI. At that time, Real-Time Demand Response Resources will no longer be utilized in the markets. However, the assets underlying Real-Time Demand Response Resources will, in many cases, continue to exist and will be re-mapped to Demand Resource Capacity Resources (through Demand Response Resources) to participate in the market. The PRD FI Changes add language to explain that for purposes of this transition, seasonal audit results of Real-Time Demand Response Assets performed in the year prior to June 1, 2017 will remain valid for a period of time following the transition. The proposed revisions also eliminate Real-Time Demand Response Resources from the qualification provisions of the Forward Capacity Market rules.

<sup>&</sup>lt;sup>40</sup> *Id.* at pp. 25-28.

<sup>&</sup>lt;sup>41</sup> *Id.* pp. 29-32 provides additional detail regarding these revisions.

<sup>&</sup>lt;sup>42</sup> *Id*.

 $<sup>^{43}</sup>$  *Id.* at pp. 32-33 provides additional detail regarding these revisions.

In addition, a new Demand Resource Capacity Resource will be able to participate in the markets prior to the commencement of the first Capacity Commitment Period for PRD FI on June 1, 2017. The PRD FI Changes add language to explain that a Demand Response Capacity Resource ready for operation prior to June 1, 2017 will be treated as a Real-Time Demand Response Resource prior to June 1, 2017.

Modify Certain Defined Terms and Terminology Usage, and the Effective Dates of Defined Terms for PRD FI. The PRD FI Changes make a number of modifications and clarifications to certain defined terms, including revising the effective dates of certain defined terms. These modifications are discussed in greater detail in the Yoshimura-Parent PRD Testimony, 44 and fall into the following categories.

- There are a number of definitions for PRD FI that are currently slated to become effective on June 1, 2017. These definitions were submitted as part of prior PRD filings and have been accepted by the Commission. Because the ISO is proposing to bring the PRD FI rules into the current tariff, it is also necessary to make the PRD FI definitions effective now.
- The proposed revisions remove certain defined terms because they are no longer utilized in the Tariff. The proposed revisions also remove outdated portions of certain defined terms.
- The proposed revisions make a number of minor clarifications to a number of definitions and also correct improperly capitalized defined terms. In addition, in Section III.8A, the revisions correct one error in the spelling of the word "weekdays," add the word "that" in a subjective clause, and correct the use of the defined term "Real-Time Emergency Generation."
- The proposed revisions also change, in Section III.13.7.1.5.10.2, the use of the terms "online" and "offline" to describe the state of the Demand Response Resource to the more appropriate concepts for demand response of "receiving" or "not receiving" a Dispatch Instruction.

Remove the Remaining References to Critical Peak Demand Resources. Critical Peak Demand Resources were a type of active demand response resource originally included in the Forward Capacity Market. Before the first Capacity Commitment Period commenced, it was determined that this resource type should be eliminated, and rules were put in place to eliminate Critical Peak Demand Resource by June 1, 2012. Earlier

<sup>&</sup>lt;sup>44</sup> *Id.* at pp. 33-38 provides additional detail regarding these revisions.

<sup>&</sup>lt;sup>45</sup> See ISO New England Inc. and New England Power Pool, Tariff Revisions Regarding Demand Resource Integration, Docket No. ER09-5-000 (filed October 1, 2008) (eliminating Critical Peak Demand Resources effective June 2012), accepted by letter order issued October 29, 2008. All Critical Peak Demand Resources were converted to other demand response resource types before June 1, 2010.

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this year the terms Critical Peak Demand Resource and their related performance hours, Demand Resource Critical Peak Hours, were deleted from the Tariff. However, there are a few remaining references to Critical Peak Demand Resources and Demand Resource Critical Peak Hours within the Tariff. The ISO proposes in this filing to eliminate the remaining references to Critical Peak Demand Resources.

Conform the Demand Reduction Threshold Price Formula to Reflect the Correct Fuel Index. Under Appendix E to Market Rule 1, a Demand Reduction Threshold Price calculation is performed on a monthly basis to satisfy the consumer net benefits test requirement that was mandated by Order No. 745. The calculation of the Demand Reduction Threshold Price utilizes the Forward Reserve Fuel Index as an input. In a series of changes made to the Forward Reserve Market rules, the ISO changed the monthly Forward Reserve Fuel Index to a daily index as part of modifications to the Forward Reserve Threshold Price calculation for the Forward Reserve Market. Accordingly, a conforming change to the energy market rules for Demand Resources in Appendix E is being made in order to retain the use of the monthly fuel index.

## VI. DESCRIPTION AND RATIONALE FOR THE NET SUPPLY REVISIONS

The Net Supply Revisions address how a Demand Response Capacity Resource participates in the Forward Capacity Market when a portion of the resource provides capacity by delivering net supply. Net supply refers to the injection of energy into the electrical grid at a Retail Delivery Point<sup>49</sup> by a Demand Response Asset with Distributed Generation. A Demand Response Asset (which is part of a Demand Response Resource, which in turn is part of a Demand Response Capacity Resource) with Distributed Generation that can operate in parallel to, and has the required interconnection with, the

<sup>&</sup>lt;sup>46</sup> See ISO New England Inc., Submission of Tariff Records to Conform Sections to Approved Language, Docket No. ER13-876-000 (filed February 4, 2013) (eliminating most of the references to Critical Peak Demand Resources), accepted by letter order issued May 31, 2013.

<sup>&</sup>lt;sup>47</sup> See ISO Tariff, Appendix E to Market Rule 1, Section 6. The consumer net benefits test is addressed in Order No. 745. See Demand Response Compensation in Organized Wholesale Energy Markets, Order No. 745, III FERC Stats. & Regs., Regs. Preambles ¶ 31,322, 76 Fed. Reg. 16658 (2011) (Order No. 745) at PP 78-81.

<sup>&</sup>lt;sup>48</sup> See ISO New England Inc. and New England Power Pool, Revisions to Market Rule 1 Related to Forward Reserve Threshold Price, Docket No. ER12-2485-000 (filed August 20, 2012), accepted by letter order issued October 24, 2012.

<sup>&</sup>lt;sup>49</sup> The Retail Delivery Point is "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." Tariff, Section I.2.2 (definitions).

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power system is capable of delivering net supply. Under the Net Supply Revisions, an asset capable of delivering net supply that meets the specifications of the revised market rules will be eligible to participate in the Forward Capacity Market as part of a Demand Response Capacity Resource and receive compensation for its capacity contribution.

# A. Background – Prior Proposal for Treatment of Net Supply That Was Rejected by the Commission

In the April 26, 2012 Filing of market rule changes to address the Forward Capacity Market treatment of Demand Resources under PRD FI, the ISO made a proposal to treat net supply in a manner that mirrored its treatment in the energy market. It stated:

Consistent with the fully integrated PRD rules accepted by the Commission in the January 19 Order, net supply from Demand Response Assets and Real-Time Emergency Generation Assets will no longer be eligible to participate in the wholesale market as a Demand Resource. Net supply is the amount of generation injected into the wholesale power grid from generators located behind an asset's Retail Delivery Point. While net supply will no longer be eligible to participate as a Demand Resource, the net supply associated with these assets can participate in the wholesale market as generation. <sup>50</sup>

Under the ISO's proposed approach in the April 26, 2012 Filing, a Market Participant with a Demand Response Asset with Distributed Generation capable of delivering capacity through a combination of demand reductions and net supply would register in the Forward Capacity Market two resources—*i.e.*, a Demand Response Capacity Resource to represent the capacity from demand reductions, and a Generating Capacity Resource to represent the capacity of the generator. The reduction in demand from the power system produced by the Demand Response Asset would contribute to the capacity value of a Demand Response Capacity Resource to which the asset is associated, and the net supply injected into the power system would contribute to the capacity value of the Generating Capacity Resource. The ISO's proposal for the PRD FI Forward Capacity Market rules was designed to be consistent with the approach the ISO proposed for the energy market, which the Commission accepted in January 2012.<sup>51</sup>

In its January 14, 2013 Order on the proposed changes, the Commission rejected the ISO's proposed treatment of net supply. Specifically, the Commission said:

<sup>&</sup>lt;sup>50</sup> April 26, 2012 Filing at p. 30.

<sup>&</sup>lt;sup>51</sup> ISO New England Inc., 138 FERC ¶ 61,042 at PP 76-86 (addressing ISO-NE's Order No. 745 compliance filing).

We reject ISO-NE's proposal regarding net supply, contained in sections III.E.7.3 and III.13.7.1.5.2 of the proposed Tariff revisions, without prejudice to ISO-NE filing revised Tariff language to clarify its rules regarding demand response resources that provide capacity through both demand reductions and behind-the-meter generation.

We recognize that the Commission accepted ISO-NE's proposal to compensate injections into the grid from behind-the-meter generation as generation in the energy market, however, ISO-NE has not explained why corresponding changes to the FCM rules are appropriate.

Therefore, based on the minimal discussion in the record before us, we cannot find that ISO-NE's proposal regarding net supply is just and reasonable. In the one example raised in the record, ISO-NE's proposal would not fully recognize the capacity value of a demand response resource. As a result, in this example, ISO-NE would procure more capacity than needed. Therefore, ISO-NE will need to address in any future filing the issues identified herein in order to ensure that the resource's capacity value is appropriately calculated and to support its proposal as just and reasonable.<sup>52</sup>

With the rejection of the ISO's proposed treatment of net supply in the April 26, 2012 Filing, the current market rules for PRD FI lack clarity on whether and how an asset capable of delivering net supply participates in the Forward Capacity Market. The Net Supply Revisions being proposed in the current filing are meant to address this lack of clarity by addressing how the capacity delivered from a Demand Resource with net supply is recognized and compensated in the Forward Capacity Market.

#### B. Rationale for the Proposed Treatment of Net Supply

The Net Supply Revisions allow "Net Supply"<sup>53</sup> delivered by a Demand Response Asset to contribute to the capacity of a Demand Response Capacity Resource with which the asset is associated. Unlike the proposed changes in the April 26, 2012 Filing, the Net Supply Revisions do *not* require the Market Participant to register in the Forward Capacity Market two resources in order to receive full credit for the capacity associated with Net Supply. Rather, the capacity associated with Net Supply will be credited directly to the Demand Response Capacity Resource with which the Demand Response Asset is associated. Therefore, the capacity provided by the Net Supply participates in

<sup>&</sup>lt;sup>52</sup> January 14, 2013 Order at PP 43-45.

<sup>&</sup>lt;sup>53</sup> Under the Net Supply Revisions, the term Net Supply is defined as "energy injected at the Retail Delivery Point by a Demand Response Asset with Distributed Generation."

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the Forward Capacity Market as part of a Demand Resource, rather than as its own, separate, generation resource. <sup>54</sup>

The Net Supply Revisions avoid certain complications inherent in the treatment proposed in the April 26, 2012 Filing. In the context of that filing, certain Market Participants raised concerns that dividing the capacity of an asset that produces both demand reductions and Net Supply between two capacity resources involved factors that could not be projected under the three year timeline required for the Forward Capacity Market. In addition, due to variations in load of the facility, and as the Commission noted in the January 14, 2013 Order, the treatment of net supply proposed in the April 26, 2012 Filing could result in not fully recognizing the capacity value of an asset that produces both demand reductions and Net Supply, which would in turn result in the region over-procuring the necessary amount of capacity. 55

As explained more fully in the Yoshimura-Parent Net Supply Testimony, the approach proposed in the Net Supply Revisions appropriately accounts for and compensates Market Participants with Demand Response Assets capable of producing Net Supply. <sup>56</sup> Because it is relatively easy to forecast the sum of demand reduction and Net Supply, and the accuracy of that forecast would be similar to that of other, single resource types, there is less risk that Market Participants will discount the capacity value of resources with Net Supply. The Yoshimura-Parent Net Supply Testimony <sup>57</sup> illustrates how the Net Supply Revisions make it easier for a Market Participant with a Demand Response Asset capable of producing Net Supply to participate in the Forward Capacity Market. The example posits a customer with:

- Overall (gross) energy consumption that normally varies between 45 to 55 MW each Operating Day.
- A Distributed Generator with a capacity of 30 MW that the customer runs in base-load fashion—*i.e.*, the generator runs at 30 MW in each interval of each Operating Day—which reduces the net energy consumption placed on the wholesale power grid by 30 MW, which in turn lowers the customer's demand response potential.
- The capability of reducing 20 MW of energy consumption in each interval, which reflects turning off specific machinery that normally run during the Operating Day and consume 20 MW.

<sup>&</sup>lt;sup>54</sup> The market rules are also being clarified so that Real-Time Emergency Generation Resources capable of producing net supply will receive full credit for the capacity associated with Net Supply.

<sup>&</sup>lt;sup>55</sup> January 14, 2013 Order at P 45.

<sup>&</sup>lt;sup>56</sup> Yoshimura-Parent Net Supply Testimony at pp. 9-13.

<sup>&</sup>lt;sup>57</sup> *Id.* at pp. 11-13.

Figure 1 from the Yoshimura-Parent Net Supply Testimony provides an illustration of what happens when this Demand Response Asset reduces its energy consumption by 20 MW in each interval.

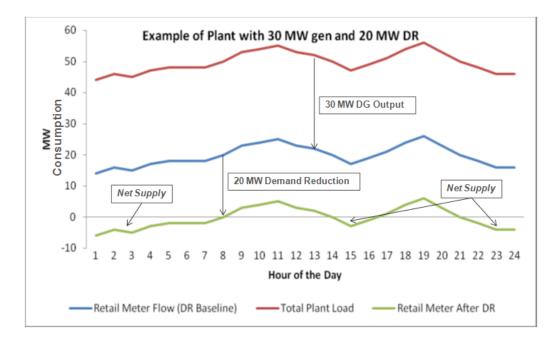


FIGURE 1: THE NET SUPPLY PROBLEM – ILLUSTRATED

Figure 1 illustrates that the amount of demand reduction from the grid and the amount of Net Supply produced can vary from interval to interval, and perhaps day to day and month to month if and when overall (gross) consumption levels change. However, the sum of demand reduction and Net Supply from interval to interval is constant at 20 MW. Quantifying three or more years ahead of real time the amount of demand reduction versus Net Supply such an asset would likely produce, and assigning those values to separate resources—*i.e.*, a Demand Response Capacity Resource and a Generating Capacity Resource, respectively—in the Forward Capacity Market qualification process may be difficult to accomplish, whereas it is relatively easy to determine what the sum of demand reduction and Net Supply will likely be.

Given that the sum of demand reduction and Net Supply is relatively stable, allowing the Net Supply *and* the demand reduction amount to be credited to the capacity of a single resource, as is proposed under the Net Supply Revisions, resolves the concerns that were raised with the ISO's initial proposal, and accurately accounts for the full capacity value of the combined resource in the Forward Capacity Market.

#### C. Explanation of the Net Supply Revisions.

A number of revisions to Market Rule 1 are being proposed to allow Net Supply delivered by a Demand Response Asset to contribute to the capacity of a Demand

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Response Capacity Resource to which the asset is associated. Each of the proposed changes, and the rationale for each change, is discussed in greater detail in Mr. Yoshimura and Mr. Parent's supporting testimony on the Net Supply Revisions.

New and Revised Defined Terms. The Net Supply Revisions add three new terms—Net Supply, Maximum Net Supply, and Net Supply Generator Asset—to Section I.2.2 of the Tariff. Net Supply is the energy injected at the Retail Delivery Point by a Demand Response Asset with Distributed Generation. Maximum Net Supply is an estimate of the maximum hourly Net Supply, which is used for Demand Response Asset registration purposes. A Net Supply Generator Asset is the Generator Asset registered in the energy market at the same Retail Delivery Point as a Demand Response Asset with Distributed Generation capable of delivering Net Supply. While Net Supply contributes to the capacity of a Demand Response Capacity Resource, Net Supply must currently be modeled as a Generator Asset that injects energy in the electric system, to enable the commitment, dispatch and settlement of Net Supply in the energy market. The definition of the existing term "Offered Full Reduction Time" is also being modified to incorporate the Economic Maximum Limit of the Net Supply Generator Asset into the performance calculation for the resource.

Baseline Computations. Section III.8B.5 on the baseline adjustment factor is being modified to account for Net Supply. Under the existing rule for PRD FI, an adjustment is made to the baseline for each Operating Day based on the difference between the computed Demand Response Baseline for the Operating Day and the actual load of the asset two hours (plus the Demand Response Resource Start-up Time) prior to the start of the first interruption interval in the Operating Day. If the actual load of the asset is higher than the computed baseline, the baseline is adjusted upward; conversely, if the actual load of the asset is lower than the computed baseline, the baseline is adjusted downward. This adjustment "result[s] in an accurate and appropriate baseline calculation methodology that will account for more recent meter data and changes in conditions, such as weather, which differ on the current operating day from those present during the days used to compute the baseline."

Under the Net Supply Revisions, if the resource is producing Net Supply during the baseline adjustment period, the adjustment calculation will include the Net Supply in

<sup>&</sup>lt;sup>58</sup> In this regard, Net Supply Generator Assets are a sub-set of Generator Assets, and therefore they must undergo all registration and interconnection processes that are required of all other Generator Assets. Therefore, a behind-the-meter generator would need to register as a Generator Asset and would need to go through all required interconnection processes in order to become a Net Supply Generator Asset, in addition to meeting all other requirements under the Tariff.

<sup>&</sup>lt;sup>59</sup> Yoshimura-Parent Net Supply Testimony at pp. 16-17 provides a more detailed explanation of these revisions.

<sup>&</sup>lt;sup>60</sup> ISO New England Inc., 138 FERC ¶ 61,042 (addressing the ISO's Order No. 745 compliance filing) at P 34.

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computing the baseline adjustment. This change will help ensure an accurate baseline, so the impact of the Demand Response Asset on the electric system to balance supply and demand in the energy market can be accurately computed.<sup>61</sup>

Forward Capacity Auction Qualification. The rules in Section III.13.1.4 containing the requirements for qualifying a resource to participate in the FCA are being modified to account for Net Supply. The revisions achieve two purposes: they incorporate the concept of a Demand Response Asset with Net Supply into the qualification requirements and they place limits on Forward Capacity Market participation in order to prevent double-counting Net Supply (once as a generator and once as a Demand Resource). For qualification purposes, the Net Supply Revisions add language to the Tariff to allow the estimated Demand Reduction Value of a Demand Response Capacity Resource to include an estimate of Net Supply. This helps ensure that a Market Participant is able to qualify the accurate amount of capacity for the Demand Response Capacity Resource. 62

Further, while a Net Supply Generator Asset may be located at the same Retail Delivery Point as a Demand Response Asset that is associated with a Demand Response Capacity Resource for the purposes of participating in the energy market, the Net Supply Revisions prevent that Generator Asset from participating in the Forward Capacity Market as a Generating Capacity Resource. As explained in the Yoshimura-Parent Net Supply Testimony, this prohibition is intended to prevent double-counting the Net Supply in the Forward Capacity Market. The one exception to this rule is for a generator for which the Market Participant has made arrangements with the Host Participant (*i.e.*, the utility distribution company) to separately meter the output of the generator so that it could participate in the wholesale energy and capacity markets directly. In these instances, the Host Participant adjusts the reading of the retail meter—by adding the generator output to the retail meter reading—to reflect the total consumption of the facility. This metering arrangement prevents double-counting the output of the generator and allows the generator and the demand to participate in the wholesale market separately. These changes are being reflected in Sections III.13.1 and III.13.1.4.3.

Availability Calculation for Supplemental Availability Bilaterals. The Forward Capacity Market rules allow a resource's availability score during a Shortage Event to be supplemented by entering into a Supplemental Availability Bilateral agreement, which in practice could allow a Market Participant to improve their overall availability rating for purposes of determining its impact during the Shortage Event. Net Supply associated with a Demand Response Capacity Resource should be allowed to provide supplemental

<sup>&</sup>lt;sup>61</sup> Yoshimura-Parent Net Supply Testimony at p. 17.

<sup>&</sup>lt;sup>62</sup> *Id.* at pp. 18-22 provides a more detailed explanation of these revisions.

<sup>&</sup>lt;sup>63</sup> *Id.* at pp. 18-19.

<sup>&</sup>lt;sup>64</sup> *Id.* at pp. 20-22.

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capacity as well as the demand reduction component of the resource. Therefore, the Net Supply Revisions include changes to Section III.13.5.3.2.3 to allow Net Supply (with proper adjustment for avoided transmission and distribution losses) to be used in the calculation of availability for Supplemental Availability Bilaterals.<sup>65</sup>

<u>Energy Market Offer Requirements</u>. Section III.13.6 contains the energy market offer requirements, as well as related performance requirements, for resources that are and are not subject to a Capacity Supply Obligation in the Forward Capacity Market. The Net Supply Revisions update several sub-sections within Section III.13.6.

Section III.13.6.1.5.1, which contains the offer requirements for resources subject to a Capacity Supply Obligation, is being updated to add the concept that a Demand Response Capacity Resource meets its energy market offer obligation by submitting Demand Reduction Offers for demand reductions produced by its Demand Response Resources *and* by submitting Supply Offers for the Net Supply produced by its Net Supply Generator Assets. The revisions in Section III.13.6.1.5.1 also add limitations on the Notification Time, Start-Up Time, Minimum Run Time and Minimum Down Time for the Supply Offers of Net Supply Generator Assets. These limitations are the same offer parameter limitations that apply to other generators that are subject to a Capacity Supply Obligation, and prevent the use of offer parameters to significantly reduce the availability of the generator. The revisions in Section III.13.6.1.5.1 also clarify that if the Net Supply Generator Asset is a Settlement Only Resource, then the Net Supply will not be represented in the offer for the Demand Response Resource. This is because Settlement Only Resources do not submit offers in the energy market, and instead provide energy as it is available.<sup>66</sup>

In addition, Section III.13.6.1.5.2, which addresses the requirement that offers reflect accurate Demand Response Capacity Resource operating characteristics, is being clarified to incorporate reference to the Supply Offers of Net Supply Generator Assets. Therefore, under the revised provision, Demand Reduction Offers of Demand Response Resources *and* Supply Offers of Net Supply Generator Assets that are associated with the same Demand Response Capacity Resource "must reflect the then-known operating characteristics of the resource."

Section III.13.6.2.5.1, which contains the offer provisions for resources that are *not* subject to a Capacity Supply Obligation, is being updated to clarify that, as with other Demand Resources not subject to a Capacity Supply Obligation, Demand Response Capacity Resources and associated Net Supply Generator Assets, are not required to offer

<sup>65</sup> *Id.* at p. 22.

 $<sup>^{66}</sup>$  Id. at pp. 22-24 provides a more detailed explanation of these revisions.

<sup>&</sup>lt;sup>67</sup> *Id.* at pp. 23-24.

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into the energy markets. If, however, an offer is submitted, the sum of the Minimum Run Time plus the Minimum Down Time must also be less than or equal to 24 hours. <sup>68</sup>

Demand Response Capacity Resource Auditing Requirements. The rules addressing the auditing of Demand Response Capacity Resources are being modified to account for the treatment of Net Supply. Given that a Net Supply Generator Asset contributes to the capacity of a Demand Response Capacity Resource, the audit of the resource needs to include an evaluation of the performance of each Net Supply Generator Asset, as well as each Demand Response Asset, that is mapped to the Demand Response Capacity Resource. Under the current Section III.13.6.1.5.4.6, audits are performed for Demand Response Capacity Resources by the ISO dispatching the resource. The audit results are calculated as the sum of average load reductions demonstrated during the audit by each Demand Response Asset that is associated with the resource. The proposed rule changes appropriately add to the audit result calculation the average Net Supply demonstrated during the period of the audit.<sup>69</sup>

Further, Sections III.13.6.1.5.4.2 and III.13.6.1.5.4.6 are being modified to address the treatment of Net Supply when a Real-Time Emergency Generation Asset is being audited and there is an injection of energy into the electric system. If a Net Supply Generator Asset and a Real-Time Emergency Generation Asset at the same location are both dispatched in the context of an audit and energy is injected into the grid, each asset could receive credit for the same injection of energy into the grid if no adjustment is made. Therefore, the rules are being modified to adjust the availability or performance of a Net Supply Generator Asset to prevent such double-counting. When the output of the Real-Time Emergency Generation Asset is greater than the adjusted Demand Response Baseline of the Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the proposed rules reduce the Net Supply by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset.

Avoided Transmission and Distribution Loss Adjustment. The market rules that apply a credit to Demand Resource demand reductions for avoided transmission and distribution losses are being revised to clarify that the credit should not apply to Net Supply. To balance supply and demand on the electric system, sufficient generation must be produced to serve the demand and to overcome transmission and distribution losses. When demand is reduced, generation inclusive of transmission and distribution losses is avoided. Because of this, a Demand Resource that reduces demand by 1.00 MW is

<sup>&</sup>lt;sup>68</sup> *Id.* at p. 24.

 $<sup>^{69}</sup>$  Id. at pp. 24-26 provides a more detailed explanation of these revisions.

<sup>&</sup>lt;sup>70</sup> *Id.* at pp. 25-26.

<sup>&</sup>lt;sup>71</sup> For example, if transmission and distribution losses are eight percent, a 1.00 MW demand reduction measured at the Retail Delivery Point avoids 1.08 MW of generation.

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credited with a 1.00 MW reduction plus an additional amount to account for the avoided transmission and distribution losses. However, Net Supply does not avoid transmission and distribution losses. Therefore, whereas the demand reduction component of a Demand Resource should be credited in the Forward Capacity Market for avoided transmission and distribution losses, Net Supply should not receive such credit. Accordingly, Sections III.13.7.1.5.2 and III.13.7.1.5.10 are being modified to clarify that the avoided transmission and distribution loss adjustment is applied to demand reductions whereas it is not applied to Net Supply.<sup>72</sup>

Hourly Availability Calculations. Under the Forward Capacity Market rules, a Demand Response Capacity Resource's available MW in each hour that contains any portion of a Shortage Event <sup>73</sup> is based upon the sum of the available MW of its associated Demand Response Resources. Since Net Supply produced by a Net Supply Generator Asset should contribute to the available MW of a Demand Response Resource, which in turn should contribute to the available MW of a Demand Response Capacity Resource, the Shortage Event penalty rules are being modified to incorporate the available MW of Net Supply Generator Assets into the availability calculations of a Demand Response Capacity Resource. Three provisions of the Forward Capacity Market rules are modified to account for Net Supply in the hourly availability calculations of a Demand Response Capacity Resource:

• Sections III.13.7.1.5.10.1 on hourly available MW and III.13.7.1.5.10.1.1 on the adjusted audited demand reduction are being modified to add Net Supply Generator Assets into the availability calculations of a Demand Response Capacity Resource. These sections are also being modified to account for the output of Real-Time Emergency Generator Assets located at the same Retail Delivery Point as a Demand Response Asset that result in an injection of energy into the electric system. As explained above in the context of the auditing rule changes, if a Net Supply Generator Asset and a Real-Time Emergency Generator Asset at the same location are both producing output and energy is injected into the grid, each asset could receive credit for the same injection of energy into the grid if no adjustment is made. Therefore, the rules are being modified to adjust the availability or performance of a Net Supply Generator Asset to prevent such double-counting.<sup>74</sup>

<sup>&</sup>lt;sup>72</sup> Yoshimura-Parent Net Supply Testimony at pp. 26-27.

<sup>&</sup>lt;sup>73</sup> Shortage Events in the Forward Capacity Market are defined system-wide and for Capacity Zones pursuant to Section III.13.7.X and are the period in which resources have their performance measured against their Capacity Supply Obligation. Resources that are determined to not be available during Shortage Events consistent with their Capacity Supply Obligation are assessed a penalty pursuant to section III.13.7.

<sup>&</sup>lt;sup>74</sup> Yoshimura-Parent Net Supply Testimony at pp. 27-28.

• Section III.13.7.1.5.10.2 on availability adjustments is being modified (1) to clarify that "asset" refers to the defined term Demand Response Asset, (2) to incorporate Net Supply Generator Asset into the availability adjustment computations, and (3) to account for the output of Real-Time Emergency Generation Assets located at the same Retail Delivery Point as a Demand Response Asset that results in an injection of energy into the electric system.<sup>75</sup>

Settlement Calculations. Modifications are being made to the Demand Resource capacity payment rules to account for necessary adjustments for Net Supply in the settlement calculations for Demand Resources. Section III.13.7.2.5.4, which specifies the conditions under which avoided distribution losses are applied in the energy settlement of Real-Time Emergency Generation Resources, is being clarified, consistent with the revisions to the rules on the calculation of the transmission and distribution loss adjustment, <sup>76</sup> so that the demand reduction component of a Demand Resource is credited for avoided losses and energy injections do not receive such credit. Similar to the rule changes described above, Section III.13.7.2.5.4.1 is being added to account for the output of a Real-Time Emergency Generation Asset, located at the same Retail Delivery Point as a Demand Response Asset, resulting in an injection of energy into the electric system. This section is being added to prevent both a Real-Time Emergency Generation Asset and a Demand Response Asset from being compensated for energy for the same Net Supply. <sup>77</sup>

<u>Conforming Energy Market Rule Changes</u>. Four sections of the energy market rules in Appendix III.E2 are being modified to account for Net Supply.

• Section III.E2.1.3 on Demand Response Asset registration is being modified to allow a single Net Supply Generator Asset to be registered at the same Node (or, for aggregations of small customers, at the same Dispatch Zone) as a Demand Response Asset that is capable of delivering Net Supply. Registering a Net Supply Generator Asset at the same Node (or Dispatch Zone) as a Demand Response Asset enables the Market Participant to receive energy payments for any Net Supply that is produced at that location. In addition, the revisions require that a Market Participant provide in the registration process the Maximum Net Supply that the Net Supply Generator Asset is capable of delivering. The Maximum Net Supply parameter is used to determine the overall size of the asset, which affects how the asset must be modeled in the energy market, which then determines how the asset must be registered with the ISO.

<sup>&</sup>lt;sup>75</sup> *Id.* at pp. 28-29.

<sup>&</sup>lt;sup>76</sup> *Supra* at pp. 9-10.

<sup>&</sup>lt;sup>77</sup> Yoshimura-Parent Net Supply Testimony at p. 29.

<sup>&</sup>lt;sup>78</sup> *Id.* at pp. 29-30.

- Section III.E2.5 on scheduling and dispatching is being modified to ensure the proper sequencing of the dispatch of a Net Supply Generator Asset. A Demand Response Asset capable of delivering Net Supply must first reduce its demand from the electric system before producing any Net Supply, because it is physically impossible for a Demand Response Asset to produce Net Supply before demand reduction. To ensure proper sequencing of the dispatch of a Demand Response Resource that consists of an aggregation of Demand Response Assets and Net Supply Generator Assets, Section III.E2.5 is being modified to clarify that all of the assets that are associated with the resource must be in the same location. If a Net Supply Generator Asset is dispatched at a specific Node, but the rest of the Demand Response Resource with which it is associated is dispersed throughout, and dispatched at, the Dispatch Zone, it is possible that localized constraints between certain Nodes in the Dispatch Zone would result in the Net Supply Generator Asset being dispatched before the demand reduction portion of the resource. To keep this from happening, Net Supply Generator Assets must be modeled and dispatched at the same Location as its associated Demand Response Resource.<sup>79</sup>
- Sections III.E2.7.2 and III.E2.7.3 are being modified to replace "net supply" with the defined term "Net Supply" or to remove unnecessary references to "net supply."

#### VII. STAKEHOLDER PROCESS

At its May 14-15, 2013 meeting, the NEPOOL Markets Committee voted unanimously to recommend that the NEPOOL Participants Committee support the PRD FI Changes and voted to recommend, with oppositions and abstentions noted, 80 that the NEPOOL Participants Committee support the Net Supply Revisions. Following Markets Committee consideration and recommendation of the PRD FI Changes and the Net Supply Revisions, both sets of changes were presented to the Participants Committee for its consideration and vote. The Participants Committee, at its June 7, 2013 meeting, supported the PRD FI Changes and Net Supply Revisions as part of its Consent Agenda. 81

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<sup>&</sup>lt;sup>79</sup> *Id.* at pp. 31-32.

<sup>&</sup>lt;sup>80</sup> There was one opposition and one abstention within the Generation Sector, one opposition and nine abstentions within the Supplier Sector, one abstention within the Alternative Resources Sector, and one abstention within the End User Sector.

<sup>&</sup>lt;sup>81</sup> The Consent Agenda for a Participants Committee meeting, similar to the Consent Agenda for a Commission open meeting, is a group of actions (each recommended by a Technical Committee or subgroup established by the Participants Committee) to be taken by the Participants Committee through approval of a single motion at a meeting. All recommendations voted on as part of the Consent Agenda are deemed to have been voted on individually and independently. In this case, the Participants Committee's approval of the June 7, 2013 Consent Agenda included its support (continued...)

## VIII. 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 market rule changes do not modify a traditional "rate" and the ISO is not a traditional investor-owned utility. Therefore, to the extent necessary, the Filing Parties request waiver of Section 35.13 of the Commission's regulations. Notwithstanding its request for waiver, the Filing Parties submit the following additional information in substantial compliance with relevant provisions of Section 35.13 of the Commission's regulations:

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

- This transmittal letter;
- Blacklined ISO Tariff sections reflecting the revisions submitted in this filing;
- Clean ISO Tariff sections reflecting the revisions submitted in this filing;
- Joint Testimony of Messrs. Yoshimura and Parent addressing the PRD FI Changes (the "Yoshimura-Parent PRD Testimony"), sponsored solely by the ISO;
- Joint Testimony of Messrs. Yoshimura and Parent addressing the PRD Net Supply Revisions (the "Yoshimura-Parent Net Supply Testimony"), sponsored solely by the ISO; and
- List of governors and utility regulatory agencies in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont to which a copy of this filing has been sent.

35.13(b)(2) — As set forth in Section II above, the Filing Parties request that the revisions become effective on August 21, 2013.

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 http://www.iso-ne.com/regulatory/ferc/nepool/gov\_prtcpnts\_eserved.pdf. A copy of this

for both the PRD FI Changes and Net Supply Revisions filed herein. One abstention was noted within the Generation Sector that was specifically attributed to the Consent Agenda item supporting the Net Supply Revisions.

<sup>(...</sup>continued)

<sup>82 18</sup> C.F.R. § 35.13 (2012).

transmittal letter and the accompanying materials have also been sent to the governors and electric utility regulatory agencies for the six New England states that comprise the New England Control Area, the New England Conference of Public Utility Commissioners, Inc., and to the New England States Committee on Electricity. 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 VIII of this transmittal letter.
- 35.13(b)(5) The reasons for this filing are discussed in Section V and Section VI of this transmittal letter.
- 35.13(b)(6) The ISO's approval of these changes is evidenced by this filing. These changes reflect the results of the Participant Processes required by the Participants Agreement and reflect the support of the Participants Committee.
- 35.13(b)(7) Neither the ISO nor NEPOOL has 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.
- <u>35.13(b)(8)</u> 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 market rule changes herein do not modify a traditional "rate," and the statement required under this Commission regulation is not applicable to the instant 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 revisions filed herein.

## IX. CONCLUSION

As explained herein, the PRD FI Changes entail clarifications to certain provisions in Appendix III.E to Market Rule 1 concerning the participation of demand response in New England's energy market, Section III.13 concerning the Forward Capacity Market, Section III.8 concerning Demand Response Baselines, and Section I.2.2 concerning definitions. These modifications are important to ensure that the rules comport with the intended design for PRD FI. Further, the Net Supply Revisions provide Market Participants that have Demand Response Assets with generation that is capable of

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delivering Net Supply to the electrical grid with the ability to register the combined demand response and generation assets as part of a single Demand Response Capacity Resource for participation in the Forward Capacity Market. This treatment helps ensure that the Market Participant receives credit for the full capacity value of the demand response and generation assets. For the reasons discussed in this transmittal letter, and as more fully explained in supporting testimony, the PRD FI Changes and the Net Supply Revisions are just and reasonable. Accordingly, the Filing Parties request that the Commission accept this filing with the revisions to become effective on August 21, 2013.

Respectfully submitted,

#### ISO NEW ENGLAND INC.

# NEW ENGLAND POWER POOL PARTICIPANTS COMMITTEE

By: /s/ Christopher J. Hamlen

Christopher J. Hamlen, Esq. ISO New England Inc. One Sullivan Road Holyoke, MA 01040-2841

Tel: (413) 540-4585 Fax: (413) 535-4379

E-mail: chamlen@iso-ne.com

By: /s/ Sebastian M. Lombardi

Sebastian M. Lombardi, Esq. Day Pitney LLP 242 Trumbull Street Hartford, CT 06103

Tel: (860) 275-0663 Fax: (860) 881-2493

Email: slombardi@daypitney.com

#### **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:

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

**Adjusted Audited Demand Reduction** is the Audited Demand Reduction of a Demand Response Resource adjusted in accordance with Section III.13.7.1.5.10.1.1.

**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.

**Administrative Sanctions** are defined in Section III.B.4.1.2 of Appendix B 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.

**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 Capacity Price Rule** is a rule potentially affecting Capacity Clearing Prices in a Forward Capacity Auction, as described in Section III.13.2.7.8 of Market Rule 1.

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

**Alternative Technologies Regulation Pilot Program** is the pilot described in Appendix J to Market Rule 1.

Amount Interrupted is, for purposes of the Load Response Program, the calculated difference between the Customer Baseline and the actual customer load. For generating assets, metered at the generator output, the Amount Interrupted is the generator output.

**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.

**Annualized FCA Payment** is used to determine a resource's availability penalties and is calculated in accordance with Section III.13.7.2.7.1.2(b) of Market Rule 1.

**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.

**APR-1** means the first of three Alternative Capacity Price Rule mechanisms described in Section III.13.2.7.8.

**APR-2** means the second of three Alternative Capacity Price Rule mechanisms described in Section III.13.2.7.8.

**APR-3** means the third of three Alternative Capacity Price Rule mechanisms described in Section III.13.2.7.8.

**Asset** is a generating unit, interruptible load, a component of a demand response resource or load asset.

**Asset Registration Process** is the ISO business process for registering a physical load, generator, or tieline for settlement purposes. The Asset Registration Process is posted on the ISO's website.

**Asset Related Demand** is a physical load that has been discretely modeled within the ISO's dispatch and settlement systems, settles at a Node and, except for pumped storage load, is made up of 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.

Asset Related Demand Bid Block-Hours are Block-Hours assigned to the Lead Market Participant for each Asset Related Demand bid. The daily bid Blocks in the price-based Real-Time bid will be multiplied by the number of hours in the day 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 risk-adjusted going forward costs of an asset that is part of an Existing Generating Capacity Resource, calculated for the asset in the same manner as the net-risk adjusted going forward costs of Existing Generating Capacity Resources as described in Section III.13.1.2.3.2.1.2.

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.

**Audited Demand Reduction** is the seasonal claimed capability of a Demand Response Resource as established pursuant to Section III.13.6.1.5.4.

**Audited Full Reduction Time** is the Offered Full Reduction Time associated with the Demand Response Resource's most recent audit.

**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 generating unit change its output while providing Regulation between the Regulation High Limit and Regulation Low Limit.

**Average Hourly Load Reduction** is either: (i) the sum of the 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; (ii) the sum of the 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; or (iii) the sum of a Critical Peak Demand Resource's electrical energy reduction during Demand Resource Critical Peak Hours in the month for that resource divided by the number of Demand Resource Critical Peak Hours less 30 minutes for each set of consecutive Real-Time Demand Resource Dispatch Hours within the same Operating Day in the month for that resource; or (iv) in each Real-Time Demand Response Event Hour, the sum of the baseline electrical energy consumption less the sum of the actual electrical energy consumption of all of the Real-Time Demand Response Assets associated with the Real-Time Demand Response Resource as registered with the ISO as of the first day of the month; or (iv) in each Real-Time Emergency Generation Event Hour, the sum of the baseline electrical energy consumption less the sum of the actual electrical energy consumption of all of the Real-Time Emergency Generation Assets associated with the Real-time Emergency Generation Resource as registered with the ISO as of the first day of the month. The Demand Resource's electrical energy reduction and Average Hourly Load Reduction shall be determined consistent with the Demand 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 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; (ii) the sum of the 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; or (iii) the sum of a Critical Peak Demand Resource's electrical energy output during Demand Resource Critical Peak Hours in the month for that resource divided by the number of Demand Resource Critical Peak Hours for that resource less 30 minutes for each set of consecutive Real Time Demand Resource Dispatch Hours within the same Operating Day in the month for that resource; or (iv) in each Real-Time Demand Response Event Hour or Real-Time Emergency Generation Event Hour, the sum of the electrical energy output of all of the Real-Time Demand Response Assets or Real-Time Emergency Generation Assets associated with the Real-Time Demand Response Resource or Real-Time Emergency Generation Resource as registered with the ISO as of the first day of the month. Electrical energy output and Average Hourly Output shall be determined consistent with the Demand 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 Monthly PER is calculated in accordance with Section III.13.7.2.7.1.1.2(a) of Market Rule 1.

**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.

**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.

**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 CIP Capital Payment** is the annual compensation level, as calculated pursuant to Section 5.1 utilizing data from Table 6 of Appendix A to this Schedule 16, or as referred to in Section 5.2, of Schedule 16 to the OATT, for a Blackstart Station's costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service.

**Blackstart CIP O&M Payment** is the annual compensation level, as calculated pursuant to Section 5.1 of Schedule 16 to the OATT, utilizing data from Table 6 of Appendix A to this Schedule 16, for a Blackstart Station's operating and maintenance costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of the provision 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 compensation, as calculated pursuant to Section 5.1 of Schedule 16 to the OATT, for a Designated Blackstart Resource's operating and maintenance costs associated with the provision of Blackstart Service (except for operating and maintenance costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**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, which also encompasses "System Restoration and Planning Service" under the predecessor version of Schedule 16.

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 under a "Signature Page for Schedule 16 of the NEPOOL OATT" that was executed and in effect prior to January 1, 2013 for Category A Designated Blackstart Resources or a commitment to provide Blackstart Service established under Operating Procedure 11 – Designated Blackstart Resource Administration (OP11) for Category B Designated Blackstart Resources.

**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).

**Blackstart Station-specific Rate CIP Capital Payment** is a component of the Blackstart Station-specific Rate Payment that reflects a Blackstart Station's 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 the day); (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 the-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); and-(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 (for Capacity Commitment Periods commencing on or after June 1, 2017, 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.

**Cancellation Fee** is defined in Section III.1.10.2(d).

Cancelled Start Credit is a credit calculated pursuant to Section III.F.2.5 of Appendix F to Market Rule 1 as the NCPC Credit due to each Market Participant for pool-scheduled generating Resources that were scheduled by the ISO to start after the close of the Day-Ahead Energy Market and that were cancelled by the ISO prior to their assigned commitment time.

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

Capability Year means a year's period beginning on June 1 and ending May 31.

**Capacity Acquiring Resource** is a resource that is seeking to acquire a Capacity Supply Obligation through a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1 of Market Rule 1.

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

**Capacity Carried Forward Due to Rationing** is described in Section III.13.2.7.8.2.1(c)(b)(ii) of Market Rule 1.

**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 Clearing Price Floor** is described in Section III.13.2.7.

**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, equal to that Market Participant's Capacity Requirement (if any) adjusted to account for any relevant Capacity Load Obligation Bilaterals, as described in Section III.13.7.3.1 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 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** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**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 Requirement** is described in Section III.13.7.3.1 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-to-Service Ratio is defined in Section III.3.2.2(h) of Market Rule 1.

Capacity Transfer Right (CTR) is a financial right that entitles the holder to the difference in the Net Regional Clearing Prices between Capacity Zones for which the transfer right is defined, in the MW amount of the holder's entitlement.

**Capacity Transferring Resource** is a resource that has a Capacity Supply Obligation and is seeking to shed such obligation, or a portion thereof, through a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1 of Market Rule 1.

**Capacity Value** is the value (in kW-month) of a Demand Resource for a month determined pursuant to Section III.13.7.1.5 of Market Rule 1.

**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.

**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.

**Carried Forward Excess Capacity** is calculated as described in Section III.13.2.7.8.2.1(c) of Market Rule 1.

Category A Designated Blackstart Resource is a Designated Blackstart Resource that has committed to provide Blackstart Service under a "Signature Page for Schedule 16 of the NEPOOL OATT" that was executed and in effect prior to January 1, 2013 and has not been converted to a Category B Designated Blackstart Resource.

**Category B Designated Blackstart Resource** is a Designated Blackstart Resource that is not a Category A 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.

**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 power year, 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 in all Load Zones. Daily Coincident Peak Contribution values shall be submitted by the Assigned Meter Reader or Host Participant by the meter reading deadline to the ISO.

**Cold Weather Conditions** means any calendar day when that day's Effective Temperatures are forecast to be equal to or less than zero degrees Fahrenheit for any single on-peak hour and that day's total Effective Heating Degree Days are forecast to be greater than or equal to 65.

**Cold Weather Event** means days when Cold Weather Conditions are forecast to exist and the Seven-Day Forecast indicates a capacity margin less than or equal to 0 MW for an Operating Day. Cold Weather Events are declared by 1100 two days prior to the Operating Day. A Cold Weather Warning will be used for all future days within the Seven-Day Forecast when a capacity margin of less than or equal to 0 MW exists, until such time that the ISO declares a Cold Weather Event.

**Cold Weather Warning** means days when Cold Weather Conditions are forecast to exist and the Seven-Day Forecast indicates a capacity margin less than 1,000 MW. In addition, a Cold Weather Warning will be used for all future days within the Seven-Day Forecast when a capacity margin of less than or equal to 0 MW exists for days not yet declared as a Cold Weather Event.

**Cold Weather Watch** means days when Cold Weather Conditions are forecast to exist and the Seven-Day Forecast indicates a capacity margin greater than or equal to 1,000 MW.

**Commercial Capacity**, for the purposes of the ISO New England Financial Assurance Policy, is defined in Section VII.A of that policy.

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

**Common Costs** are those costs associated with a Station that are avoided only by (1) the clearing of the Static De-List Bids or the Permanent De-List Bids of all the Existing Generating Capacity Resources comprising the Station; or (2) the acceptance of a Non-Price Retirement Request of 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 Generating Capacity 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.

**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.

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 value that was determined by the ISO for each Forward Capacity Auction pursuant to the provisions of Section III.13 of Market Rule 1 in effect at the time of that auction.

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, a performance or surety bond, or a combination thereof.

**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.

**Curtailment** 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.

Customer Baseline is the average aggregate hourly load, rounded to the nearest kWh, for each of the 24 hours in a day for each Load Response Program Asset participating in the Real-Time Price Response Program, and the average aggregated five minute load, rounded to the nearest kWh, for each of the 24 hours in a day for Real-Time Demand Response Assets and Real-Time Emergency Generation Resource assets.

**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)(iii) of Market Rule 1.

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

**Day-Ahead Demand Reduction Obligation** is a cleared Demand Reduction Offer multiplied by one plus the percent average avoided peak distribution losses. <u>For Capacity Commitment Periods commencing on or after June 1, 2017, Day-Ahead Demand Reduction Obligation is the hourly demand reduction amounts of a Demand Response Resource scheduled by the ISO as a result of the Day-Ahead Energy Market, multiplied by one plus the percent average avoided peak distribution losses.</u>

**Day-Ahead Energy Market** means the schedule of commitments for the purchase or sale of energy, payment of Congestion Costs, and 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 and purchase of demand reductions pursuant to Appendix III.E2 of Market Rule 1 for Capacity Commitment Periods commencing on or after June 1, 2017.

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

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

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

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

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

**Day-Ahead Load Response Program** provides a Day-Ahead aspect to the Load Response Program. The Day-Ahead Load Response Program allows Market Participants with registered Load Response Program Assets to make energy reduction offers into the Day-Ahead Load Response Program concurrent with the Day-Ahead Energy Market.

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

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

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

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

**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 Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for <u>Demand Response Resources</u>, Real-Time Demand Response Resources and Real-Time Emergency Generation 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 Real-Time Demand Response Asset to reduce demand. For Capacity Commitment Periods commencing on or after June 1, 2017, Demand Reduction Offer is an offer by a Market Participant with a Demand Response Resource to reduce demand.

**Demand Reduction Threshold Price** is a minimum offer price calculated pursuant to Section III.E<u>1</u>.6 and Section III.E2.6.

**Demand Reduction Value** is the quantity of reduced demand calculated pursuant to Section III.13.7.1.5.3 of Market Rule 1.

**Demand Resource** is a resource defined as Demand Response Capacity Resources, On-Peak Demand Resources, Seasonal Peak Demand Resources, Real-Time Demand Response Resources, or Real-Time Emergency Generation Resources. Demand Resources are installed measures (i.e., products, equipment, systems, services, practices and/or strategies) that result in additional and verifiable reductions in end-use demand on the electricity network in the New England Control Area pursuant to Section-Appendix III.E1 and Appendix III.E2 of Market Rule 1, or during Demand Resource On-Peak Hours, Demand Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours, respectively. A Demand Resource may include a portfolio of measures aggregated together to meet or exceed the minimum Resource size requirements of the Forward Capacity Auction.

**Demand Resource Commercial Operation Audit** is an audit initiated pursuant to Section III.13.6.1.5.4.4.

**Demand Resource Forecast Peak Hours** are those hours, or portions thereof, in which, absent the dispatch of Critical Peak Demand Resources and Real-Time Demand Response Resources, Dispatch Zone, Load Zone, or system-wide implementation of the action of ISO New England Operating Procedure No. 4 where the ISO would have begun to allow the depletion of Thirty-Minute Operating Reserve is forecasted in the ISO's most recent next-day forecast.

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

**Demand Resource Operable Capacity Analysis** means an analysis performed by the ISO estimating the expected dispatch hours of active Demand Resources given different assumed levels of Demand Resources clearing in the primary Forward Capacity Auction.

**Demand Resource Performance Incentives** means the additional monthly capacity payment that a Demand Resource may earn for producing a positive Monthly Capacity Variance in a period where other Demand Resources yield a negative monthly capacity variance.

**Demand Resource Performance Penalties** means the reduction in the monthly capacity payment to a Demand Resource for producing a negative Monthly Capacity Variance.

**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 the pumping load associated with pumped storage generators) for Monday through Friday on non-Demand Response holidays 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.

<u>Demand Response Asset</u> is the electricity consumption of an individual end-use customer at a Retail Delivery Point or the aggregated electricity consumption of multiple end use customers from multiple delivery points that meets the registration requirements in Section III.E2.2.

<u>Demand Response Available</u> 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 or the expected output levels of the generation of an individual end-use metered customer whose asset is comprised of Distributed Generation as determined pursuant to Section III.8A or Section III.8B.

**Demand Response 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.

Demand Response Holiday is a holiday for which a Market Participant may not submit a Demand Reduction Offer for a Real-Time Demand Response Asset 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 Dispatch Zone that meets the registration requirements and participates in the Energy Market pursuant to Appendix III.E2 of Market Rule 1 for Capacity Commitment Periods commencing on or after June 1, 2017.

<u>Demand Response Resource Notification Time</u> is the minimum time, from the receipt of a Dispatch Instruction, that it takes a Demand Response Resource that was not previously reducing demand to start reducing demand.

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

<u>Demand Response Resource Start-Up Time</u> is the time required from the time a Demand Response Resource that was not previously reducing demand starts reducing demand in response to a Dispatch Instruction and the time the resource achieves its Minimum Reduction.

**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, and may be a Category A Designated Blackstart Resource or a Category B Designated Blackstart Resource.

**Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for generation 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)** is the Dispatch Rate expressed in megawatts.

**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

Resources, change External Transactions, or change the status of a Dispatchable Asset Related Demand in accordance with the Resource's or contract's Supply Offer or Demand Bid 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 Rate** means the control signal, expressed in dollars per MWh and/or megawatts, calculated and transmitted to direct the output level of each generating Resource and each Dispatchable Asset Related Demand and each Demand Response Resource dispatched by the ISO in accordance with the Offer Data.

**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.13.1.4.6.1.

Dispatchable Asset Related Demand is any portion of an Asset Related Demand of a Market Participant that is capable of having its energy consumption modified in Real-Time in response to Dispatch Instructions has Electronic Dispatch Capability, and 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 Manuals. Pumped storage facilities may qualify as Dispatchable Asset Related Demand resources, however, such resources shall not qualify as a capacity resource for both the generating output and dispatchable pumping demand of the facility.

**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 resources directly connected to end-use customer load and located behind the end-use customer's Retail Delivery Point for the end-use customer<u>meter</u>, which reduce the amount of energy that would otherwise have been produced by other capacity resources on the electricity network in the New England Control Area during Demand Resource On-Peak Hours, Demand

Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours, provided that the aggregate nameplate capacity of the generation resource does not exceed 5 MW, or does not exceed the most recent annual non-coincident peak demand of the end-use metered customer at the location where the generation resource is directly connected, whichever is greater. Generation resources cannot participate in the Forward Capacity Market or the Energy Markets as Demand Resources or Demand Response Resources, unless they meet the definition of Distributed Generation.

**Do Not Exceed Dispatch Point** is a Dispatch Instruction indicating a maximum output level that a wind resource must not exceed.

**DR** Auditing Period is the summer DR Auditing Period or winter DR Auditing Period as defined in Section III.13.6.1.5.4.3.1.

**Dynamic De-List Bid** is a bid that may be submitted by Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources in the Forward Capacity Auction at prices of \$1.00/kW-month or lower, as described in Section III.13.2.3.2(d) of Market Rule 1.

**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 Maximum Limit or Economic Max** is the maximum available output, in MW, of a resource that a Market Participant offers to supply in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the resource's Supply Offer. This represents the highest MW output a Market Participant has offered for a resource for economic dispatch. A Market Participant must maintain an up-to-date Economic Maximum Limit for all hours in which a resource has been offered into the Day-Ahead Energy Market or Real-Time Energy Market.

Economic Minimum Limit or Economic Min is the maximum of the following values: (i) the Emergency Minimum Limit; (ii) a level supported by environmental and/or operating permit restrictions; or (iii) a level that addresses any significant economic penalties associated with operating at lower levels that can not be adequately represented by three part bidding (Start-Up Fee, No-Load Fee and incremental energy price). In no event shall the Economic Minimum Limit submitted as part of a generating unit's Offer Data be higher than the generation level at which a generating unit's incremental heat rate is minimized (i.e., transitioning from decreasing as output increases to increasing as output increases) except that a Self-Scheduled Resource may modify its Economic Minimum Limit on an hourly basis, as part of its Supply Offer, in order to indicate the desired level of Self-Scheduled MWs.

**Economic Study** is defined in Section 4.1(b) of Attachment K to the OATT.

**EFT** is electronic funds transfer.

**Effective Heating Degree Days** is equal to 68 – (average of max and min Effective Temperature of the day).

Effective Temperature is equal to dry bulb temperature – [windspeed X (65-dry bulb temp)/100].

Elective Transmission Upgrade is a Transmission Upgrade that is participant-funded (i.e., voluntarily funded by an entity or entities that have agreed to pay for all of the costs of such Transmission Upgrade), and is not: (i) a Generator Interconnection Related Upgrade; (ii) a Reliability Transmission Upgrade (including a NEMA Upgrade, as appropriate); (iii) an Market Efficiency Transmission Upgrade (including a NEMA Upgrade, as appropriate); or (iv) initially proposed in an Elective Transmission

Upgrade Application filed with the ISO in accordance with Section II.47.5 on a date after the addition or modification already has been otherwise identified in the current Regional System Plan (other than as an Elective Transmission Upgrade) in publication as of the date of that application.

**Elective Transmission Upgrade Applicant** is defined in Section II.47.5 of the OATT.

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

**Electronic Dispatch Capability** is the ability to provide for the electronic transmission, receipt, and acknowledgment of data relative to the dispatch of generating units and Dispatchable Asset Related Demands and the ability to carry out the real-time dispatch processes from ISO issuance of Dispatch Instructions to the actual increase or decrease in output of dispatchable Resources.

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 generation amount, in MWs, that a generating unit 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, in order to facilitate: (1) bilateral Energy transactions; (2) self-scheduling of Energy; (3) Interchange Transactions in the Energy Market; and (4) Energy Imbalance Service under Section II 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 hours for which the Customer has a positive or negative Real-Time System Adjusted Net Interchange as determined by the ISO settlement process for the Energy Market.

**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 and Energy Non-Zero Spot Market Settlement Hours.

**Enrolling Participant** is the Market Participant that registers Customers for the Load Response Program.

**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, the Capacity Requirement 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.

**Estimated Net Regional Clearing Price (ENRCP)** is calculated in accordance with Section VII.C of the ISO New England Financial Assurance Policy.

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

**Exempt Real-Time Generation Obligation** means that portion of a Market Participant's Real-Time Generation Obligation that is not included in the calculation of Minimum Generation Emergency Credits pursuant to Appendix F of Market Rule 1.

**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 by 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, and, subject to ISO evaluation, for the Forward Capacity Auction to be conducted beginning February 1, 2008, any resource that is under construction and within 12 months of its expected commercial operations date.

**Existing Demand Resource** is a type of Demand Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.1.1 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 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.

**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.

**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 Generator means a generating unit that the ISO may dispatch within the hour 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) time to start does not exceed 30 minutes; (iv) available for dispatch and manned or has automatic remote dispatch capability; (v) capable of receiving and acknowledging a start-up or shut-down dispatch instruction electronically; and (vi) has satisfied its minimum down time.

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

**FCA Payment** is the monthly capacity payment for a resource whose offer has cleared in a Forward Capacity Auction as described in Section III.13.7.2.1.1(a) of Market Rule 1.

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

**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.

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.

Forecast Hourly Demand Reduction means the estimated maximum quantity of energy reduction (MWh), measured at the end-use customer meter that can be produced by a Real-Time Demand Response Resource, or Real-Time Emergency Generation Resource, in each hour of an Operating Day. For a Real-Time Emergency Generation Asset that is metered at the generator and associated with a Real-Time Emergency Generation Resource, the Forecast Hourly Demand Reduction means the estimated maximum generator output (MWh) in each hour of an Operating Day.

**Formal Warning** is defined in Section III.B.4.1.1 of Appendix B of Market Rule 1.

**Formula-Based Sanctions** are defined in Section III.B.4.1.3 of Appendix B of Market Rule 1.

**Forward Capacity Auction (FCA)** is the annual descending clock auction in the Forward Capacity Market, as 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 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 \$14,000/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 Award Financial Assurance** is a required amount of financial assurance that must be maintained at all times from a Designated FTR Participant for each FTR awarded to the participant in any FTR Auctions. This amount is calculated pursuant to Section VI.C of the ISO New England Financial Assurance Policy.

**FTR Bid Financial Assurance** is an amount of financial assurance required from a Designated FTR Participant for each bid submission into an FTR auction. This amount is calculated pursuant to Section VI.B of the ISO New England Financial Assurance Policy.

**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 generator that has been registered 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 Adjusted Audited Demand Reduction** is calculated in accordance with Section III.13.7.1.5.10.1.2.

**Hourly Calculated Demand Resource Performance Value** means the performance of a Demand Resource during Real-Time Demand Response Event Hours and Real-Time Emergency Generation Event Hours for purposes of calculating a Demand Reduction Value pursuant to Sections III.13.7.1.5.7.3 and III.13.7.1.5.8.3.

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

**Hourly PER** is calculated in accordance with Section III.13.7.2.7.1.1.1(a) of Market Rule 1.

**Hourly Real-Time Demand Response Resource Deviation** means the difference between the Average Hourly Load Reduction or Average Hourly Output of the Real-Time Demand Response Resource and the amount of load reduction or output that the Market Participant was instructed to produce pursuant to a Dispatch Instruction calculated pursuant to Section III.13.7.1.5.7.3.1.

**Hourly Real-Time Emergency Generation Resource Deviation** is calculated pursuant to Section III.13.7.1.5.8.3.1.

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

**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.

**Inadequate Supply** is defined in Section III.13.2.8.1 of Market Rule 1.

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

**Inadvertent Energy Revenue Charges or Credits** is defined in Section III.3.2.1(1) 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 generation 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.

**Insufficient Competition** is defined in Section III.13.2.8.2 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 and Attachment 1 to Schedule 23 of the OATT.

**Interconnection Agreement** is the "Large Generator Interconnection Agreement" or the "Small Generator Interconnection Agreement" pursuant to Schedules 22 and 23 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 and Attachment 1 to Schedule 23 of the OATT.

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

**Interconnection Procedure** is the "Large Generator Interconnection Procedures" or the "Small Generator Interconnection Procedures" pursuant to Schedules 22 and 23 of the ISO OATT.

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

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

**Intermittent Power Resource** is defined in Section III.13.1.2.2.2 of Market Rule 1.

**Intermittent Settlement Only Resource** is a Settlement Only Resource that is also an Intermittent Power Resource.

**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 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.

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.

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** 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.

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 or Demand Bids 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 generating resources 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.

Load Management means installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that curtail electrical usage or shift electrical usage from Demand Resource On-Peak Hours, Demand Resource Seasonal Peak Hours, or Real-Time Demand Response Event Hours to other hours and reduce the amount of capacity needed, 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, chilled water storage, and other forms of electricity storage.

**Load Response Program** means the program implemented and administered by the ISO to promote demand side response as described in Appendix E to Market Rule 1.

Load Response Program Asset means one or more individual end-use metered customers that report load reduction and consumption, or generator output as a single set of values, are assigned an identification number, that participate in the Load Response Program and which encompass assets registered in the Real-Time Price Response Program or Real-Time Demand Response Assets, and are further described in Appendix E of Market Rule 1.

**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 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 the minimum amount of capacity that must be located within an import-constrained Load Zone, calculated as described in Section III.12.2 of Market Rule 1.

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

Localized Costs are the incremental costs resulting from a RTEP02 Upgrade or a Regional Benefit Upgrade that exceeds those requirements that the ISO deems reasonable and consistent with Good Utility Practice and the current engineering design and construction practices in the area in which the Transmission Upgrade is built. In making its determination of whether Localized Costs exist, the ISO will consider, in accordance with Schedule 12C of the OATT, the reasonableness of the proposed engineering design and construction method with respect to alternate feasible Transmission Upgrades and the relative costs, operation, timing of implementation, efficiency and reliability of the proposed Transmission Upgrade. The ISO, with advisory input from the Reliability Committee, as appropriate, shall review such Transmission Upgrade, and determine whether there are any Localized Costs resulting from such Transmission Upgrade. If there are any such costs, the ISO shall identify them in the Regional System Plan.

**Location** is a Node, External Node, Load Zone or Hub. <u>For Capacity Commitment Periods commencing</u> on or after June 1, 2017, the Location also is a Dispatch Zone.

**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 or

Reliability Region is the Zonal Price for that Load Zone or Reliability Region, respectively; and the Locational Marginal Price for a Hub is the Hub Price for that Hub. <u>For Capacity Commitment Periods</u> commencing on or after June 1, 2017, the Location Marginal Price for a Dispatch Zone is the Zonal Price for that Dispatch Zone.

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

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.

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

**Major Transmission Outage** is a major transmission outage scheduled in accordance with ISO New England Operating Procedure No. 3.

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

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

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 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 Obligations is defined in Section III.B.1.1 of Appendix B of Market Rule 1.

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 the maximum amount of capacity that can be procured in an export-constrained Load Zone, calculated as described in Section III.12.2 of Market Rule 1, to meet the Installed Capacity Requirement.

**Maximum Consumption Limit** is the maximum amount, in MW, available from the Dispatchable Asset Related Demand for economic dispatch and is based on the physical characteristics as submitted as part of a Resource's Offer Data except that a Self-Scheduled Dispatchable Asset Related Demand may modify its Minimum Consumption Limit on an hourly basis, as part of its Demand Bid, in order to indicate the desired level of Self-Scheduled MW.

Maximum Facility Load is the most recent annual non-coincident peak demand or, if unavailable, an estimate of the annual non-coincident peak demand of a Real-Time Demand Response Asset or a Real-Time Emergency Generation Asset, where the demand evaluated is established by adding actual metered demand and the output of all generators located behind the asset's end\_use customer meter in the same time intervals.

**Maximum Generation** is the maximum generation output of a Real-Time Demand Response Asset comprised of Distributed Generation or the maximum generation output of a Demand Response Asset comprised of Distributed Generation.

Maximum Interruptible Capacity is an estimate of the maximum hourly demand reduction amount that a Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or a Demand Response Asset can deliver. For assets that deliver demand reduction, the Maximum Interruptible Capacity is the asset's peak load less its uninterruptible load. For assets that deliver reductions through the use of generation, the Maximum Interruptible Capacity is the difference between the generator's maximum possible output and its expected output when not providing demand reduction.

**Maximum Load** is the most recent annual non-coincident peak demand or, if unavailable, an estimate of the annual non-coincident peak demand, of a <u>Demand Response Asset</u>, Real-Time Demand Response Asset or Real-Time Emergency Generation Asset.

Maximum Net Supply is an estimate of the maximum hourly Net Supply for a Demand Response Asset as measured from the Demand Response Asset's Retail Delivery Point.

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 a 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 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 Value of the Demand 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 Value for an Existing Demand Resource is not overstated in a subsequent Capacity Commitment Period. Measure Life shall be determined consistent with the Demand 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, which includes 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 a Demand Resource supplier 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 Demand Resource suppliers 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 Value of the 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 a Demand Resource supplier with the monthly settlement report for the Forward Capacity Market, which documents the total Demand Reduction Values for all 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.

**Minimum Consumption Limit** is the minimum amount, in MW, available from a Dispatchable Asset Related Demand that is not available for economic dispatch and is based on the physical characteristics as submitted as part of a Resource's Offer Data.

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

**Minimum Generation Emergency Charge** means the charge used to allocate the cost of Minimum Generation Emergency Credits. Minimum Generation Emergency Charges are discussed in Appendix F of Market Rule 1.

**Minimum Generation Emergency Credits** are credits calculated pursuant to Appendix F of Market Rule 1 to compensate certain generating Resources for operation in excess of their Economic Minimum Limits during a Minimum Generation Emergency.

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 Time Between Reductions is the minimum number of hours that a Market Participant requires between the time the Demand Response Resource receives a Dispatch Instruction from the ISO

to not reduce demand and the time the Demand Response Resource receives a Dispatch Instruction from the ISO to reduce demand.

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

**Monthly Capacity Variance** means a Demand Resource's actual monthly Capacity Value established pursuant to Section III.13.7.1.5.1 of Market Rule 1, minus the Demand Resource's final Capacity Supply Obligation for the month.

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

Monthly PER is calculated in accordance with Section III.13.7.2.7.1.1.2(a) of Market Rule 1.

**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 tenth 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.

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 as provided in Section III.3.2.3, Section III.6.4 and Appendix F.

**NCPC Credit** means the payment made to a Resource as provided in Section III.3.2.3, Section III.6.4 and Appendix F.

**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.

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

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

**Net Regional Clearing Price** is described in Section III.13.7.3 of Market Rule 1.

**Net Supply** is energy injected at the Retail Delivery Point by a Demand Response Asset with Distributed Generation.

Net Supply Generator Asset is the Generator Asset registered in the energy market at the same Retail Delivery Point as a Demand Response Asset with Distributed Generation capable of delivering Net Supply.

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

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

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 Resource, as described in Section III.13.2.3.2 of Market Rule 1.

**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 Required** is the amount of additional capacity required to meet the Installed Capacity Requirement or a Capacity Zone's Local Sourcing Requirement, as described in Section III.13.2.8.1.1 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 Resource Show of Interest Form, as described in Section III.13.1.10 of Market Rule 1.

**New Demand Resource** is a type of Demand Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.1.2 of Market Rule 1.

**New Demand Resource Qualification Package** is the information that a Project Sponsor must submit, in accordance with Section III 13.1.4.2.3 of Market Rule 1, for each resource that it seeks to offer in the Forward Capacity Auction as a New Demand Resource.

New Demand Resource Show of Interest Form is described in Section III.13.1.4.2 of Market Rule 1.

**New Demand Response Asset** is a Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or Demand Response Asset that is registered with the ISO, has been mapped to a resource, is ready to respond, and has been included in the dispatch model of the remote terminal unit but does not have a winter audit value and a summer audit value.

**New Demand Response Asset Audit** is an audit of a New Demand Response Asset performed pursuant to Section III.13.6.1.5.4.8.

**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.

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.

**Nodal Amount** is node(s)-specific on-peak and off-peak proxy value to which an FTR bid or awarded FTR bid relates.

**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 generating unit that must be paid to Market Participants with an Ownership Share in the unit 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 generating unit 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.13.7.3.1.3.

**Non-Commercial Capacity**, for the purposes of the ISO New England Financial Assurance Policy, is defined in Section VII.B of that policy.

**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 calculated in accordance with Section VII.B.2(i) 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-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-Intermittent Settlement Only Resource** is a Settlement Only Resource that is not an Intermittent Power Resource.

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-Price Retirement Request** is a binding request to retire the entire capacity of a Generating Capacity Resource as described in Section III.13.1.2.3.1.5.

**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.

**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 generating unit and Dispatchable Asset Related Demand, and for Capacity Commitment Periods commencing on or after June 1, 2017, Demand Response Resource operating limits based on physical characteristics, and information necessary to schedule and dispatch generating and Dispatchable Asset Related Demand Resources, and for Capacity Commitment Periods commencing on or after June 1, 2017.

Demand Response Resources for the provision of energy and 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.

**Offered CLAIM10** is a Supply Offer value between 0 and the CLAIM10 of a Resource that represents the amount of TMNSR available from the Resource.

**Offered CLAIM30** is a Supply Offer value between 0 and the CLAIM30 of a Resource that represents the amount of offline TMOR available from the Resource.

Offered Full Reduction Time is the <u>value Demand Response Resource Notification Time plus the Demand Response Resource Start up Time plus ((the Maximum Reduction minus the Minimum Reduction) divided by the Demand Response Resource Ramp Rate).calculated pursuant to Section III.13.6.1.5.4.6.</u>

On-Peak Demand Resource is a type of Demand 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 generating unit asset or Load Asset, where such unit or load 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.

**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.

**Peak Energy Rent (PER)** is described in Section III.13.7.2.7.1 of Market Rule 1.

**PER Proxy Unit** is described in Section III.13.7.2.7.1 of Market Rule 1.

**Percent of Total Demand Reduction Value Complete** means the delivery schedule as a percentage of a Demand Resource's total Demand Reduction Value that will be or has been achieved as of specific target dates, as described in Section III.13 of Market Rule 1.

**Permanent De-list Bid** is a bid that may be submitted by an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Resource in the Forward Capacity Auction to permanently remove itself from the capacity market, as described in Section III.13.1.2.3.1.2 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 II Transfer Credit** is 60% of the HQICC, or such other fraction of the HQICC as the ISO may establish.

**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.

**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(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.

**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.

**Poorly Performing Resource** is described in Section III.13.7.1.1.5 of Market Rule 1.

**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 Credit** is calculated pursuant to Section III.F.2.6.2 of Appendix F to Market Rule 1.

**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 or New Demand Resource participate in the Forward Capacity Market, as described in Section III.13.

**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.

**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.

**Queue Position** has the meaning specified in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**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.

**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 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)(iii) of Market Rule 1.

Real-Time Adjusted Load Obligation Deviation is defined in Section III.3.2.1(c)(iii) of Market Rule 1.

**Real-Time Commitment Periods** are periods of continuous operation bounded by a start up and the earlier to occur of a shut-down or a unit trip used to determine eligibility for Real Time NCPC Credit.

**Real-Time Congestion Revenue** is defined in Section III.3.2.1(f) of Market Rule 1.

**Real-Time Demand Reduction Obligation** is a Real-Time demand reduction amount determined pursuant to Section III.E1.8 for Capacity Commitment Periods commencing prior to June 1, 2017, and Section III.E2.7 for Capacity Commitment Periods commencing on or after June 1, 2017.

**Real-Time Demand Resource Dispatch Hours** means those hours, or portions thereof, in which ISO New England Operating Procedure No. 4 is implemented and the ISO has begun to allow the depletion of Thirty-Minute Operating Reserve on a Dispatch Zone, Load Zone, or system-wide basis, and the ISO notifies the Market Participants with Real-Time Demand Response Resources of such hours.

**Real-Time Demand Response Asset** means one or more individual end-use metered customers that are located at a single Node, report load reduction and consumption, or generator output as a single set of values, are assigned a unique asset identification number by the ISO, and that participate in the Forward Capacity Market as part of a Market Participant's Real-Time Demand Response Resource.

**Real-Time Demand Response Event Hours** means hours when the ISO dispatches Real-Time Demand Response Resources in response to Demand Resource Forecast Peak Hours and Real-Time Demand Resource Dispatch Hours, which may include Dispatch Zone, Load Zone, or system-wide dispatch of such resources.

**Real-Time Demand Response Resource** is a type of Demand Resource that is comprised of installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that: (i) curtail electrical usage in response to a Dispatch Instruction; and (ii) continue curtailing electrical usage until receiving Dispatch Instructions to restore electrical usage. Such measures include Load Management and Distributed Generation. The period of curtailment shall be consistent with Real-Time Demand Response Event Hours.

**Real-Time Emergency Generation Asset** means one or more individual end-use metered customers that are located at a single Node, report load reduction and consumption, or generator output as a single set of values, are assigned a unique asset identification number by the ISO, and that participate in the Forward Capacity Market as part of a Market Participant's Real-Time Emergency Generation Resource.

Real-Time Emergency Generation Event Hours means those hours, or portions thereof, between 7 a.m. and 7 p.m. Monday through Friday, non-Demand Response holidays in which the ISO dispatches Real-Time Emergency Generation Resources to curtail electric consumption. Real-Time Emergency Generation Resources would be dispatched by the ISO on a Load Zone or system-wide basis when deficient in Thirty Minute Operating Reserve and when the ISO implements voltage reductions of five percent of normal operating voltage that require more than 10 minutes to implement. Beginning on June 1, 2011, Real-Time Emergency Generation Event Hours means those hours, or portions thereof, between 7 a.m. and 7 p.m. Monday through Friday, non-Demand Response holidays-Holidays in which the ISO dispatches Real-Time Emergency Generation Resources on a Dispatch Zone, Load Zone, or system-wide basis when deficient in Thirty-Minute Operating Reserve and when the ISO implements voltage reductions of five percent of normal operating voltage that require more than 10 minutes to implement.

**Real-Time Emergency Generation Resource** is Distributed Generation whose federal, state and/or local air quality permits, rules or regulations limit operation in response to requests from the ISO to the times when the ISO implements voltage reductions of five percent of normal operating voltage that require more than 10 minutes to implement. A Real-Time Emergency Generation Resource must be capable of: (i) curtailing its end-use electric consumption from the New England grid within 30 minutes of receiving a Dispatch Instruction; and (ii) continuing that curtailment until receiving a Dispatch Instruction to restore consumption.

**Real-Time Energy Market** means the purchase or sale of energy, <u>purchase of demand reductions</u> <u>pursuant to Appendix III.E2 of Market Rule 1</u>, 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(e) of Market Rule 1.

**Real-Time Energy Market Deviation Energy Charge/Credit** is defined in Section III.3.2.1(e) of Market Rule 1.

**Real-Time Energy Market Deviation Loss Charge/Credit** is defined in Section III.3.2.1(e) of Market Rule 1.

Real-Time Generation Obligation is defined in Section III.3.2.1(b)(ii) of Market Rule 1.

**Real-Time Generation Obligation Deviation** is defined in Section III.3.2.1(c)(ii) of Market Rule 1.

**Real-Time High Operating Limit** is the maximum output, in MW, of a resource that could be achieved, consistent with Good Utility Practice, in response to an ISO request for Energy under Section III.13.6.4 of Market Rule 1, for each hour of the Operating Day, as reflected in the resource's Offer Data. This value is based on real-time operating conditions and the physical operating characteristics and operating permits of the unit.

**Real-Time Load Obligation** is defined in Section III.3.2.1(b)(i) of Market Rule 1.

**Real-Time Load Obligation Deviation** is defined in Section III.3.2.1(c)(i) of Market Rule 1.

Real-Time Locational Adjusted Net Interchange is defined in Section III.3.2.1(b)(iv) of Market Rule 1.

**Real-Time Locational Adjusted Net Interchange Deviation** is defined in Section III.3.2.1(c)(iv) of Market Rule 1.

**Real-Time Loss Revenue** is defined in Section III.3.2.1(i) 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 Price Response Program** is the program described in Appendix E 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.2.4 of Market Rule 1.

**Real-Time Reserve Credit** is a Market Participant's compensation associated with that Market Participant's Resources' Real-Time Reserve Designation 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 adjusted after-the-fact utilizing revenue quality meter data as described under Section III.10 of Market Rule 1.

Real-Time Reserve Opportunity Cost is defined in Section III.2.7A(b) of 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.5.6.1 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 an 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) and shall not be credited or reduced for any behind-the-meter generation. 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.

**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 generating unit with appropriate telecommunications, control and response capability to increase or decrease its output in response to a regulating control signal, in accordance with the specifications in the ISO New England Manuals and ISO New England Administrative Procedures.

**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 Capability (REGCAP)** means the amount of Regulation capability available on a Market Participant's Resource as calculated by the ISO based upon that Resource's Automatic Response Rate and the available regulating range as specified in ISO New England Manual 11 – Market Operations.

**Regulation Clearing Price** is defined in Section III.3.2.2(e) of Market Rule 1.

**Regulation High Limit** is the maximum amount of energy that a generating unit can reliably produce when that unit is providing Regulation. The Regulation High Limit may be less than or equal to the unit's Economic Maximum Limit.

**Regulation Low Limit** is the minimum amount of energy that a generating unit can reliably produce when that unit is providing Regulation. The Regulation Low Limit may be greater than or equal to the unit's Economic Minimum Limit.

**Regulation Opportunity Cost** is defined in Section III.3.2.2(i) of Market Rule 1.

**Regulation Rank Price** is calculated in accordance with Section III.1.11.5(b) of Market Rule 1.

**Regulation Requirement** is the hourly amount of Regulation MWs required by the ISO to maintain system control and reliability as calculated and posted on the ISO website.

**Regulation Service Credit** is the credit associated with provision of Regulation Service Megawatts and is calculated in accordance with Section III.3.2.2(c) of Market Rule 1.

Regulation Service Megawatts are calculated in accordance with Section III.3.2.2(f) of Market Rule 1.

**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.

**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, for Capacity Commitment Periods commencing on or after June 1, 2017, 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 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 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 generating unit, a Dispatchable Asset Related Demand, an External Resource or an External Transaction or, for Capacity Commitment Periods commencing on or after June 1, 2017, 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 enduse 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.

**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.

**Sanctionable Behavior** is defined in Section III.B.3 of Appendix B 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 generating unit or ISO-approved combination of units, and represent the maximum dependable load carrying ability of such unit or units, excluding capacity required for station use.

**Seasonal Claimed Capability Audit** is the audit performed pursuant to Section III.1.5.1.3.

**Seasonal DR Audit** is a seasonal audit of the demand response capability of a Demand Resource initiated pursuant to Section III.13.6.1.5.4.1.

Seasonal Peak Demand Resource is a type of Demand 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.

**Self-Schedule** is the action of a Market Participant in committing and/or scheduling its Resource, in accordance with applicable ISO New England Manuals, to provide service in an hour, whether or not in the absence of that action the Resource would have been scheduled or dispatched by the ISO to provide the service. <u>Demand Response Resources are not permitted to Self-Schedule.</u>

**Self-Scheduled MW** is an amount, in megawatts, that is Self-Scheduled and is equal to the greater of: (i) the Resource's Economic Minimum Limit; or (ii) the Resource's Minimum Consumption Limit; or (iii) for a generating Resource for which the Regulation Self-Schedule flag is set for the hour and the unit was on Regulation for at least 20 minutes during the applicable hour of the Operating Day, the median value of all Regulation setpoints (Desired Dispatch Point) used by the Resource while regulating.

**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 office.

**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.D of the ISO New England Financial Assurance Policy.

**Settlement Only Resources** are generators of less than 5 MW or otherwise eligible for Settlement Only Resource treatment as described 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.

**Seven-Day Forecast** has the meaning specified in Section III.H.3.3(a).

**Shortage Event** is defined in Section III.13.7.1.1.1 of Market Rule 1.

**Shortage Event Availability Score** is the average of the hourly availability scores for each hour or portion of an hour during a Shortage Event, as described in Section III.13.7.1.1.1.A of Market Rule 1.

**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.

**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).

**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 generating unit to Market Participants with an Ownership Share in the unit each time the unit 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.

**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 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 risk-adjusted going forward costs associated with a Station that are avoided only by (1) the clearing of the Static De-List Bids or the Permanent De-List Bids of all the Existing Generating Capacity Resources comprising the Station; or (2) the acceptance of a Non-Price Retirement Request of the Station, calculated in the same manner as the net-risk adjusted going forward costs of Existing Generating Capacity Resources as described in Section III.13.1.2.3.2.1.2.

**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.

**Successful FCA** is a Forward Capacity Auction in which a Capacity Zone has neither Inadequate Supply nor Insufficient Competition.

**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. 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.

**Supplemental Availability Bilateral** is described in Section III.13.5.3.2 of Market Rule 1.

**Supplemental Capacity Resources** are described in Section III.13.5.3.1 of Market Rule 1.

**Supplemented Capacity Resource** is described in Section III.13.5.3.2 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. The daily bid Blocks in the price-based Real-Time offer/bid will be multiplied by the number of hours in the day 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, or Schedule 23 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.

**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 the reserve capability of a generating unit that can be converted fully into energy within ten minutes from the request of the ISO, and is provided by generating units that are either electrically synchronized or not electrically synchronized to the New England Transmission System or the reserve capability of a Dispatchable Asset Related Demand that can be fully utilized within ten minutes from the request of the ISO to reduce consumption.

**Ten-Minute Non-Spinning Reserve Service** is the form of Ancillary Service described in Schedule 6 of the OATT.

**Ten-Minute Spinning Reserve (TMSR)** is the reserve capability of a generating unit that can be converted fully into energy within ten minutes from the request of the ISO or a Dispatchable Asset Related Demand pump that can reduce energy consumption to provide reserve capability within ten minutes from the request of the ISO, and is provided by generating units and Dispatchable Asset Related Demand pumps electrically synchronized to the New England Transmission System.

**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) means the reserve capability of a generating unit that can be converted fully into energy within thirty minutes from the request of the ISO, and is provided by generating units that are either not electrically synchronized or synchronized to the New England Transmission System or the reserve capability of a Dispatchable Asset Related Demand that can be fully utilized within thirty minutes from the request of the ISO to reduce consumption.

**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.

**Time-on-Regulation Credit** is the credit associated with provision of Time-on-Regulation Megawatts and is calculated in accordance with Section III.3.2.2(b) of Market Rule 1.

**Time-on-Regulation Megawatts** is the amount of Regulation capability provided during one hour calculated in accordance with Section III.3.2.2(g) of Market Rule 1.

**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 O&M Payment** is the annual compensation calculated under either Section 5.1 or 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 Negative Hourly Demand Response Resource Deviation** means the absolute value of the sum of the negative Hourly Real-Time Demand Response Resource Deviations and negative Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Dispatch Zone.

**Total Positive Hourly Demand Response Resource Deviation** means the sum of the positive Hourly Real-Time Demand Response Resource Deviations and positive Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Dispatch Zone.

**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 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 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.

**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 Demand Resource project. The Updated Measurement and Verification Plan may include updated Demand Resource 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 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.

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. 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.

### III.8<u>A</u> Demand Response Baselines

Section III8.A shall govern Demand Response Baselines calculated for Capacity Commitment Periods commencing prior to June 1, 2017.

A Demand Response Baseline is calculated for any Real-Time Demand Response Asset or Real-Time Emergency Generation Asset that requires a baseline on a daily basis using five-minute meter data.

### 8A.1 Establishing the Initial Demand Response Baseline

The Demand Response Baseline for a new Real-Time Demand Response Asset or Real-Time Emergency Generation Asset (an asset with no previously computed Demand Response Baseline) shall be the simple average of meter data for the asset for each five-minute interval from the initial ten non-Demand Response Holiday weekdays. The initial ten non-Demand Response Holiday weekdays of meter data used to establish the Demand Response Baseline shall consist of the first ten consecutive non-Demand Response Holiday weekdays with a complete set of interval meter data. A Market Participant may not submit Demand Reduction Offers until the month following the initial establishment of a Demand Response Baseline for an asset.

### 8<u>A</u>.2 Establishing the Demand Response Baseline for the Next Day

If, for a Real-Time Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline:

- (a) the asset has been dispatched or audited in the present day pursuant to Section III.13, or;
- (b) the Demand Reduction Offer associated with the asset is eligible in the present Operating Day for payments pursuant to Section III.E1.9, or;
- (c) the present day is a Demand Response Holiday, Saturday or Sunday, then:

the asset's Demand Response Baseline, in each five-minute interval, for the next day is equal to the Demand Response Baseline, in the same five-minute interval from the present day.

# 8<u>A</u>.3 Determining if Meter Data From the Present Day is Used in the Demand Response Baseline for the Next Day

If, for a Real-time Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline:

- (a) the present day is not a Demand Response Holiday, Saturday or Sunday, and; the asset has not been dispatched or audited in the present day pursuant to Section III.13, and; the Demand Reduction Offer associated with the asset is not eligible in any hour of the present day for payments pursuant to Section III.E1.9, or;
- (b) the present day is not a Demand Response Holiday, Saturday or Sunday and more than seven of the prior 10 non-Demand Response Holiday weekedays have established a Demand Response Baseline determined pursuant to Section III.8A.2; then:

the asset's Demand Response Baseline in each five-minute interval, for the next day is calculated as the sum of 0.9 times the asset's Demand Response Baseline established for the present day in the same five-minute interval and 0.1 times the asset's meter data in the same five-minute interval from the present day.

#### **8A.4** Baseline Adjustment

# 8A.4.1 Baseline Adjustment for Real-Time Demand Reductions From Real-Time Demand Response Assets Without Generation or From Real-Time Emergency Generation Assets Without Additional Generation

For each day the ISO calculates the Real-Time demand reduction amount of a Real-Time Demand Response Asset or Real-Time Emergency Generation Asset, the ISO will calculate an adjustment factor equal to the average difference (MW) between the asset's actual metered demand and its Demand Response Baseline in the intervals during the two-hour period beginning 2.5 hours prior to the start of the first interruption interval in the Operating Day. The adjustment factor will be added to the Demand Response Baseline in every interval of the day, which may increase or decrease the Demand Response Baseline. However, the resulting adjusted Demand Response Baseline in any interval shall not be less than zero and shall not exceed the asset's Maximum Load.

8A.4.2 Baseline Adjustment for Real-Time Demand Reductions From Real-Time Demand Response Assets with Generation or From Real-Time Emergency Generation Assets With Additional Generation

For each day that the ISO calculates the Real-Time demand reduction amount of a Real-Time Demand Response Asset or Real-Time Emergency Generation Asset, the ISO will calculate an adjustment factor equal to the average difference (MW) between the sum of the asset's actual metered demand and the output of all generators, or for Real-Time Emergency Generator Assets all additional generators, located behind the asset's end-use customer meter in the same time intervals and the asset's Demand Response Baseline in the intervals during the two-hour period beginning 2.5 hours prior to the start of the first interruption interval in the Operating Day. The adjustment factor will be added to the Demand Response Baseline in every interval of the day, which may increase or decrease the Demand Response Baseline. However, the resulting adjusted Demand Response Baseline in any interval shall not be less than zero and shall not exceed the asset's Maximum Facility Load.

# 8<u>A</u>.4.3 Baseline Adjustment for Real-Time Demand Reductions Produced By Directly Metered Generation

For each day that the ISO calculates the Real-Time demand reduction amount of a Real-Time Demand Response Asset that is comprised of a Distributed Generation asset located behind the end-use customer meter of an individual end-use customer facility, the asset's Demand Response Baseline shall not be subject to the baseline adjustment.

#### III.8B \_\_\_\_\_Demand Response Baselines

Section III.8B shall govern Demand Response Baselines calculated for Capacity Commitment Periods commencing on or after June 1, 2017.

A Demand Response Baseline is calculated in 5-minute intervals for each Demand Response Asset <u>and</u> <u>each Real-Time Emergency Generation Asset that is metered at the Retail Delivery Point for the following day types:</u>

- (a) weekdays (Monday-Friday) that are non-ISO settlement holidays Demand Response Holidays;
- (b) Saturdays, and;
- (c) Sundays (including Demand Response Holidays).

#### **8B.1** Demand Response Baseline Calculations

If a Demand Response Asset's metered demand represents a net-Net supply-Supply of energy to the electrical system, the Demand Response Asset's metered demand in the interval will be set equal to zero and that zero demand value will be used in the Demand Response Baseline calculations for that interval pursuant to Sections III.8B.2 and III.8B.4.

#### 8B.1.1 Demand Response Baseline Real-Time Emergency Generation Asset Adjustment

To the extent a Real-Time Emergency Generation Asset is located at the same Retail Delivery Point as a Demand Response Asset, the metered output of the Real-Time Emergency Generation Asset, in each five-minute interval, shall be added to the metered demand measured at the Retail Delivery Point in the same intervals for purposes of determining the Demand Response Asset's Demand Response Baseline.

#### 8B.2 Establishing an Initial Demand Response Baseline

The Demand Response Baseline for a Demand Response Asset or Real-Time Emergency Generation

Asset that is metered at the Retail Delivery Point with no previously computed Demand Response

Baseline shall be the simple average of metered demand data for the asset for each five-minute interval, subject to the conditions in Section III.8B.1, from the initial ten-10 days of the same day type. The initial 10 days of meter data used to establish the Demand Response Baseline shall consist of the first 10 consecutive days of the same day type with a complete set of interval meter data. A Market Participant

may not submit Demand Reduction Offers for a given day type until the month following the initial establishment of the Demand Response Baseline of the same day type for a Demand Response Asset.

#### 8<u>B.3</u> Establishing a Demand Response Baseline for the <u>Present Next Day</u>

If, for a Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline for a day type and the asset has been dispatched or audited in the present day pursuant to Section III.13 or Section E2.5, the Demand Reduction Offer of the Demand Response Resource associated with the Demand Response Asset is eligible in the Operating Day for payments pursuant to Section III.E.9, then the Demand Response Baseline of the Demand Response Asset or Real-Time Emergency Generation Asset, in each five-minute interval, for the present next day of the same day type is equal to the Demand Response Baseline of that Demand Response Asset or Real-Time Emergency Generation Asset, in the same five-minute interval from the prior-present dayday of the same day type.

## 8<u>B</u>.4 <u>Establishing a Determing if Meter Data from the Present Day is Used in the Demand</u> Response Baseline for the Next Day of the Same Day Type

If, for a Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline for that day type:

- (a) the asset has not been dispatched or audited in the present day Demand Reduction Offer of the Demand Response Resource associated with the Demand Response Asset is not eligible in the Operating Day for payments pursuant to Section III.13 or Section III.E2.95, or;
- (b) the Demand Reduction Offer associated with the asset is eligible in the Operating Day for payments pursuant to Section III.E.9 and or more than seven of the prior 10 days of the same day type have a Demand Response Baseline determined pursuant to Section III.8B.3, then:

Asset in each five-minute interval, for the next day of the same day type as the present day, is calculated as the sum of 0.9 times the Demand Response Baseline of that Demand Response Asset or Real-Time

Emergency Generation Asset for the present day in the same five-minute interval from the prior day of the same day type and 0.1 times the Demand Response Asset's or Real-Time Emergency Generation

<u>Asset's</u> meter data, subject to the conditions in Section III.8<u>B</u>.1, in the same five-minute interval in-from the present day.

#### 8B.5 Baseline Adjustment

For each day that a Demand Response Resource associated with a Demand Response Asset is scheduled in the Day-Ahead Energy Market or that a Demand Response Resource associated with a Demand Response Asset is dispatched in Real-Time for a demand reduction amount greater than zero, the ISO will calculate an adjustment factor equal to the average difference (MW) between the Demand Response Asset's metered demand which shall be adjusted pursuant to Section III.8B.1.1 (inclusive of any Net Supply), and its Demand Response Baseline in the intervals during the two-hour period for Demand Response Resources beginning two hours plus the Demand Response Resource's Start-up-Up Time prior to the start of the first interruption interval in the Operating Daypresent day. For each day that a Real-Time Emergency Generation Asset is dispatched in Real-Time for a demand reduction amount greater than zero, the ISO will calculate an adjustment factor equal to the averge difference (MW) between the Real-Time Emergency Generation Asset's metered demand and its Demand Response Baseline in the intervals during the two-hour period for Real-Time Emergency Generation Resource beginning 2.5 hours prior to the start of the first interruption interal in the present day.

The adjustment factor will be added to the Demand Response Baseline in every interval of the day, which may increase or decrease the Demand Response Baseline. However, the resulting adjusted Demand Response Baseline in any interval shall not be less than zero and shall not exceed the Demand Response Asset's facility's Maximum Load-value. For purposes of establishing the adjusted Demand Response Baseline, if a Demand Response Asset's metered demand represents a net-Net supply Supply of energy to the electrical grid, the Demand Response Asset's metered demand in the interval will be set equal to zero.

### III.13.1. Forward Capacity Auction Qualification.

Each resource, or portion thereof, must qualify as a New Generating Capacity Resource (Section III.13.1.1), an Existing Generating Capacity Resource (Section III.13.1.2), a New Import Capacity Resource or Existing Import Capacity Resource (Section III.13.1.3), or a New Demand Resource or Existing Demand Resource (III.13.1.4). Each resource must be at least 100 kW in size to participate in the Forward Capacity Auction, except for resources registered with the ISO prior to the earliest date that any portion of this Section III.13 becomes effective. An offer may be composed of separate resources, pursuant to the provisions of Section II.13.1.5. Pursuant to the provisions of this Section III.13.1, the ISO shall determine a summer Qualified Capacity and a winter Qualified Capacity for each resource, and an FCA Qualified Capacity for each New Generating Capacity Resource, New Import Capacity Resource, and New Demand Resource. A Generating Capacity Resource and a Demand Resource may not both participate in the Forward Capacity Market if located at the same Retail Delivery Point, unless the Generating Capacity Resource is separately metered and its output is added to the metered load as measured at the Retail Delivery Point.

All Project Sponsors must be Market Participants no later than 30 days prior to the deadline for submitting the financial assurance deposit described in Section III.13.1.9.

#### III.13.1.1. New Generating Capacity Resources.

To participate in a Forward Capacity Auction as a New Generating Capacity Resource, a resource or proposed resource must meet the requirements of this Section III.13.1.1. A New Generating Capacity Resource may elect, during the qualification process, to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that clears in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only, as described in Section III.13.1.1.2.2.4.

#### III.13.1.1.1. Definition of New Generating Capacity Resource.

A resource or a portion of a resource that is not a New Import Capacity Resource or Existing Import Capacity Resource (as defined in Section III.13.1.3), or a New Demand Resource or Existing Demand Resource (as discussed in Section III.13.1.4) shall be considered a New Generating Capacity Resource for participation in a Forward Capacity Auction if either: (i) the resource has never previously been counted as a capacity resource as described in Section III.13.1.1.1.1; or (ii) the resource, or a portion thereof, meets one of the criteria in Section III.13.1.1.1.2.

#### III.13.1.1.1.1. Resources Never Previously Counted as Capacity.

(a) A resource, or a portion thereof, will be considered to have never been counted as a capacity resource if: (i) it never previously received any payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010, except any such payment that is received after the resource has cleared as a New Generating Capacity Resource in a Forward Capacity Auction; and (ii) it has not cleared in any previous Forward Capacity Auction.

### (b) [Reserved.]

Where a New Capacity Generating Resource was accepted for participation in the qualification process for a previous Forward Capacity Auction, but cleared less than its summer Qualified Capacity in that previous Forward Capacity Auction and is having its critical path schedule monitored by the ISO in accordance with Section III.13.3, the portion of the resource that did not clear in the previous Forward Capacity Auction shall be a New Generating Capacity Resource in the subsequent Forward Capacity Auction. Such a New Generating Capacity Resource must satisfy all of the qualification process requirements applicable to a New Generating Capacity Resource as described in Section III.13.1.1.2, except that the Project Sponsor is not required to resubmit documentation demonstrating site control (Section III.13.1.1.2.2.1) or to resubmit a critical path schedule (Section III.13.1.1.2.2.2) or to provide a new Qualification Process Cost Reimbursement Deposit (Section III.13.1.1.2.1(e)).

#### III.13.1.1.1.2. Resources Previously Counted as Capacity.

A resource that has previously been counted as a capacity resource, including a deactivated or retired capacity resource, may elect to participate in the Forward Capacity Auction as a New Generating Capacity Resource, as described in this Section III.13.1.1.1.2. The incremental expenditure required to reactivate a resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) may be included in the calculation of the dollar per kilowatt thresholds in this Section III.13.1.1.1.2. A resource accepted for participation in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section III.13.1.1.1.2 shall participate in the Forward Capacity Auction pursuant to Section III.13.2.3.2(e). A resource shall be accepted for participation as a new resource if it complies with one of the following three subsections:

- (a) Where investment in the resource will result, by the commencement of the Capacity Commitment Period, in an increase in output by an amount exceeding the greater of: (i) 20 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction; or (ii) 40 MW above the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction, the whole resource shall participate in the Forward Capacity Auction as a New Generating Capacity Resource; or
- (b) Where investment in the resource subsequent to January 1, 2007 and prior to the conclusion of the first Capacity Commitment Period associated with the Capacity Supply Obligation for which treatment as a new resource may be applied, for the purposes of re-powering will be equal to or greater than \$200 per kilowatt of the whole resource's summer Qualified Capacity after re-powering, the owner of the resource may elect that the whole resource participate in the Forward Capacity Auction as a New Generating Capacity Resource. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs; or
- (c) Where investment in the resource subsequent to January 1, 2007 and prior to the conclusion of the first Capacity Commitment Period associated with the Capacity Supply Obligation for which treatment as a new resource may be applied, for the purpose of compliance with environmental regulations or permits will be equal to or greater than \$100 per kilowatt of the whole resource's summer Qualified Capacity after the investment, the owner of the resource may elect that the whole resource participate in the Forward Capacity Auction as a New Generating Capacity Resource. The \$100 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs.

### III.13.1.1.1.3. Incremental Capacity of Resources Previously Counted as Capacity.

The owner of a resource previously counted as a capacity resource may elect to have the incremental amount of capacity above the summer Qualified Capacity of the resource at the time of the qualification process participate in the Forward Capacity Auction as a New Generating Capacity Resource, where investment in the resource:

(a) will result, by the start of the Capacity Commitment Period, in an increase in output greater than 2 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction, but less than or equal to the greater of: (i) 20 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction; or (ii) 40 MW; and

(b) will be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs. These investment costs may include the costs associated with reactivating a resource that was previously deactivated pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and in which investment in the resource was undertaken prior to reactivation. If the incremental amount of capacity seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section does not cause the resource to exceed the megawatt amount approved in the resource's Interconnection Agreement, the Project Sponsor must submit a New Capacity Qualification Package but is not required to submit a New Capacity Show of Interest Form for the incremental amount by the New Capacity Qualification Deadline. If the incremental amount of capacity seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section III.13.1.1.1.3 causes the resource to exceed the megawatt amount approved in the resource's Interconnection Agreement or MW amount approved pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), the Project Sponsor must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2 for the incremental amount.

#### III.13.1.1.1.4. De-rated Capacity of Resources Previously Counted as Capacity.

For purposes of the Forward Capacity Market, de-rated capacity of a resource shall be measured by the difference between the summer Qualified Capacity prior to the de-rating of the resource and the most recent summer demonstration of Seasonal Claimed Capability of a resource, as of the fifth Business Day of October. The owner of a resource previously counted as a capacity resource that has been de-rated by at least 2 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) but by no more than the lesser of 20 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) or 40 MW for three or more years at the time of the Forward Capacity Auction may elect to have the incremental amount of capacity above the capacity level established while de-rated treated as a New Generating Capacity Resource if it demonstrates that it will be reestablished prior to the start of the Capacity Commitment Period and that the investment in the resource for such purposes shall be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The Project Sponsor must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2.2 for the incremental amount of capacity for the relevant Forward Capacity Auction. The

\$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs. The owner of a resource seeking to have the incremental amount of capacity counted as a New Generating Capacity Resource as provided in this Section, must demonstrate based on historical data that the resource previously operated at a level at least 2 percent above the de-rated amount.

#### III.13.1.1.1.5. Treatment of Resources that are Partially New and Partially Existing.

For purposes of this Section III.13.1, where only a portion of a single resource is treated as a New Generating Capacity Resource, either as a result of partial clearing in a previous Forward Capacity Auction or pursuant to Section III.13.1.1.1.3 or Section III.13.1.1.1.4, then except as otherwise indicated in this Section III.13.1, that portion of the resource shall be treated as a New Generating Capacity Resource, and the remainder of the resource shall be treated as an Existing Generating Capacity Resource.

#### III.13.1.1.1.6. Treatment of Deactivated and Retired Units.

- (a) [Reserved.]
- (b) A resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), as applicable, that submits to the ISO a reactivation plan demonstrating that the resource shall return to Commercial Operation shall, subject to ISO review and acceptance of that reactivation plan, be treated as an Existing Generating Capacity Resource unless that resource satisfies the criteria under Section III.13.1.1.1.2 as a New Generating Capacity Resource. Such reactivation plans must be received by the ISO no later than 10 Business Days before the Existing Capacity Qualification Deadline. A resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), as applicable, that submits to the ISO a reactivation plan demonstrating that the resource shall return to Commercial Operation and having a material modification as described in Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), as applicable, shall be subject to Section III.13.1.1.2.3 (Initial Interconnection Analysis).

#### III.13.1.1.2. Qualification Process for New Generating Capacity Resources.

For a resource to qualify as a New Generating Capacity Resource, the resource's Project Sponsor must make two separate submissions to the ISO: First, the Project Sponsor must submit a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Second, the Project

Sponsor must submit a New Capacity Qualification Package no later than the New Capacity Qualification Deadline. Each of these submissions is described in more detail in this Section III.13.1.1.2. The Project Sponsor must also submit to the ISO an Interconnection Request under Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff prior to submitting a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Both the New Capacity Show of Interest Form and the New Capacity Qualification Package are required regardless of the status of the project under the generator interconnection procedures described in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff. Neither the New Capacity Show of Interest Form nor the New Capacity Qualification Package constitutes an Interconnection Request. A Project Sponsor may withdraw from the qualification process at any time prior to three Business Days before the submission of the financial assurance deposit pursuant to Section III.13.1.9.1 by providing written notification of such withdrawal to the ISO. Any withdrawal, whether pursuant to this provision or as determined by the ISO (for example as described in Section III.13.1.1.2.1 or Section III.13.1.9.3), shall be irrevocable. The Project Sponsor of a withdrawn application is subject to reconciliation of its Qualification Process Cost Reimbursement Deposit described in Section III.13.1.9.3. Upon submission of the financial assurance deposit by the Project Sponsor pursuant to Section III.13.1.9.1, the resource is obligated to participate and will be included in the Forward Capacity Auction at its FCA Qualified Capacity amount at the Forward Capacity Auction Starting Price. None of the provisions of this Section III.13.1, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, supersedes, replaces, or satisfies any of the requirements of Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff, except as specifically provided thereunder. Determinations by the ISO pursuant to this Section III.13.1.1.2, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, are for purposes of qualification for participation in the Forward Capacity Auction only, and do not constitute a right or approval to interconnect, and do not guarantee the ability to interconnect.

#### III.13.1.1.2.1. New Capacity Show of Interest Form.

Except as otherwise provided in this Section III.13.1.1.2.1, for each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must submit to the ISO a New Capacity Show of Interest Form as described in this Section III.13.1.1.2.1 during the New Capacity Show of Interest Submission Window. After submission of a New Capacity Show of Interest Form, material changes (as defined in Section 4.4 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff) may not be made to the information contained therein. The New Capacity Show of Interest Form is available on the ISO website.

A New Capacity Show of Interest Form to which a material change has been made shall be considered withdrawn. No change that may result in a reduction in capacity may be made to a project described in a New Capacity Show of Interest Form or New Capacity Qualification Package between the date that is 150 days before the start of the Forward Capacity Auction and the deadline for qualification determination notifications described in Section III.13.1.1.2.8.

- (a) A completed New Capacity Show of Interest Form shall include the following information, to the extent the information is not already provided under an active Interconnection Request under Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff, and other such information necessary to evaluate a project: the project name; the Project Sponsor's contact information; the Project Sponsor's ISO customer status; the project's expected Commercial Operation date; the project address or location, and if relevant, asset identification number; the status of the project under the generator interconnection procedures described in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff; whether the resource has ever previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010; the capacity (in MW) of the New Generating Capacity Resource; the Economic Minimum Limit (in MW) of the New Generating Capacity Resource; a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21 or some other type); a simple location plan and a one-line diagram of the plant and station facilities, including any known transmission facilities; the location of the proposed interconnection; and other specific project data as set forth in the New Capacity Show of Interest Form. The ISO may waive the submission of any information not required for evaluation of a project. A completed New Capacity Show of Interest Form shall also specify the Queue Position associated with the project pursuant to Section 4.1 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff. Submittal of the Interconnection Request may take place prior to the qualification process described here, but no later than the date on which the New Capacity Show of Interest Form is submitted to the ISO; however, the Interconnection Customer Interconnection Request must still be active and consistent with the project described in the New Capacity Show of Interest Form as well as the New Capacity Qualification Package to be submitted as described in Section III.13.1.1.2.2.
- (b) The Project Sponsor must submit with the New Capacity Show of Interest Form, documentation demonstrating that the Project Sponsor has already achieved control of the project site for the duration of the relevant Capacity Commitment Period. Site control shall have the same meaning as set forth in Schedule 22 or Schedule 23, as applicable, of Section II of the Transmission, Markets and Services Tariff.

A resource that has previously been counted as a capacity resource is not required to submit site control documentation.

- (c) In the New Capacity Show of Interest Form, the Project Sponsor must indicate if the New Generating Capacity Resource is incremental capacity associated with a resource that previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010 as discussed in Section III.13.1.1.1.3, or if the New Generating Capacity Resource is incremental capacity associated with a resource previously listed as a capacity resource that has been de-rated for three or more years at the time of the Forward Capacity Auction, as discussed in Section III.13.1.1.1.4.
- (d) [Reserved.]
- (e) With the New Capacity Show of Interest Form, the Project Sponsor must submit the Qualification Process Cost Reimbursement Deposit, as described in Section III.13.1.9.3.

#### III.13.1.1.2.2. New Capacity Qualification Package.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must submit a New Capacity Qualification Package no later than the New Capacity Qualification Deadline, described in Section III.13.1.10. Except as otherwise provided in this Section III.13.1, the New Capacity Qualification Package shall conform to the requirements of this Section III.13.1.1.2.2. The ISO may waive the submission of any information not required for evaluation of a project. No change that may result in a reduction in capacity may be made to a project described in a New Capacity Show of Interest Form or New Capacity Qualification Package between the date that is 150 days before the start of the Forward Capacity Auction and the deadline for qualification determination notifications described in Section III.13.1.1.2.8.

#### **III.13.1.1.2.2.1.** Site Control.

For all Forward Capacity Auctions and reconfiguration auctions, the Project Sponsor must submit, with the New Capacity Show of Interest Form, documentation demonstrating that the Project Sponsor has already achieved control of the project site for the duration of the relevant Capacity Commitment Period. Site control shall mean that: (i) the Project Sponsor is the owner in fee simple of the real property on which the project will be located; (ii) the Project Sponsor holds a valid written leasehold interest in the real property on which the project will be located; (iii) the Project Sponsor holds a valid written option,

exercisable solely by the Project Sponsor or its assignee, to purchase or lease property on which the project will be located; or (iv) the Project Sponsor holds a duly executed written contract to purchase or lease the real property on which the project will be located. A resource that has previously been counted as a capacity resource is not required to submit site control documentation.

#### III.13.1.1.2.2.2. Critical Path Schedule.

In the New Capacity Qualification Package, the Project Sponsor must provide a critical path schedule for the project with sufficient detail to allow the ISO to evaluate the feasibility of the project being built and the feasibility that the project will meet the requirement that the project achieve Commercial Operation as qualified no later than the start of the relevant Capacity Commitment Period. The critical path schedule shall include, at a minimum, the dates on which the following milestones have or are expected to occur:

- (a) **Major Permits**. In the New Capacity Qualification Package, the Project Sponsor must list all major permits required for the project, and for each major permit, the Project Sponsor must list the agency requiring the permit, the date on which application for the permit is expected to be made, and the expected date of approval. Major permits shall include, but are not limited to: (i) all federal and state permits; and (ii) local, regional, and town permits. The permitting and installation process associated with any major ancillary infrastructure (such as new gas pipelines, new water supply systems, or large storage tanks) should be included in this portion of the New Capacity Qualification Package.
- (b) **Project Financing Closing**. In the New Capacity Qualification Package, the Project Sponsor shall provide (i) the estimated dollar amount of required project financing; (ii) the expected sources of that financing; and (iii) the expected closing date(s) for the project financing.
- (c) **Major Equipment Orders**. In the New Capacity Qualification Package, the Project Sponsor must provide a list of all of the major components necessary for the project, and the date or dates on which all major components necessary for the project have been or are expected to be ordered. Although the specific technology will determine the list of major components to be included, the list shall include, to the extent applicable: (i) electric generators which may include equipment such as fuel cells or solar photovoltaic equipment; (ii) turbines; (iii) step-up transformers; (iv) relay panels (v) distributed control systems; and (vi) any other single piece of equipment or system such as a cooling water system, steam generation, steam handling system, water treatment system, fuel handling system or emissions control system that is not included as a sub-component of other equipment listed in this Section III.13.1.1.2.2.2(d) and that accounts for more than five percent of the total project cost.

- (d) **Substantial Site Construction**. In the New Capacity Qualification Package, the Project Sponsor must provide the approximate date on which the amount of money expended on construction activities occurring on the project site is expected to exceed 20 percent of construction financing costs.
- (e) **Major Equipment Delivery**. In the New Capacity Qualification Package, the Project Sponsor must provide the dates on which the major equipment described in subsection (d) above has been or is scheduled to be delivered to the project site.
- (f) **Major Equipment Testing**. In the New Capacity Qualification Package, the Project Sponsor must provide the date or dates on which each piece of major equipment described in subsection (d) above is scheduled to undergo testing, including major systems testing, as appropriate for the specific technology to establish its suitability to allow, in conjunction with other major equipment, subsequent Commercial Operation of the project in accordance with the design capacity of the resource and in accordance with Good Utility Practice. The test(s) shall include those conducted at the point at which the operation of the major equipment will be determined to be in compliance with the requirements of the engineering or purchase specifications.
- (g) **Commissioning**. In the New Capacity Qualification Package, the Project Sponsor must provide the date on which the project is expected to have demonstrated the level of performance specified in the New Capacity Show of Interest Form and in the New Capacity Qualification Package.
- (h) **Commercial Operation**. In the New Capacity Qualification Package, the Project Sponsor must provide the date by which the project is expected to achieve Commercial Operation. This date must be no later than the start of the Capacity Commitment Period associated with the Forward Capacity Auction.

#### III.13.1.1.2.2.3. Offer Information.

(a) All New Generating Capacity Resources that might submit offers in the Forward Capacity Auction at prices below the relevant Offer Review Trigger Price must include in the New Capacity Qualification Package the lowest price at which the resource requests to offer capacity in the Forward Capacity Auction and supporting documentation justifying that price as competitive in light of the resource's costs (as described in Section III.A.21). This price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that Section.

- (b) The Project Sponsor for a New Generating Capacity Resource must indicate in the New Capacity Qualification Package if an offer from the New Generating Capacity Resource may be rationed. A Project Sponsor may specify a single MW quantity at or above the Economic Minimum Limit to which offers may be rationed. Without such indication, offers will only be accepted or rejected in whole. This rationing election shall apply for the entire Forward Capacity Auction.
- (c) By submitting a New Capacity Qualification Package, the Project Sponsor certifies that an offer from the New Generating Capacity Resource will not include any anticipated revenues the resource is expected to receive for its capacity cost as a Qualified Generator Reactive Resource pursuant to Schedule 2 the OATT.

#### III.13.1.1.2.2.4. Capacity Commitment Period Election.

In the New Capacity Qualification Package, the Project Sponsor must specify whether, if its New Capacity Offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. If no such election is made in the New Capacity Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Capacity Offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Capacity Offer clears. If a New Capacity Offer clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.1.2.2.4.

# III.13.1.1.2.2.5. Additional Requirements for Resources Previously Counted As Capacity. In addition to the information described elsewhere in this Section III.13.1.1.2.2:

(a) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2 (re-powering), Section III.13.1.1.1.3 (incremental capacity), or Section III.13.1.1.1.4 (de-rated capacity), the Project Sponsor must include in the New Capacity Qualification Package documentation of the costs associated with the project in sufficient detail

to allow the ISO to determine that the relevant cost threshold (described in Sections III.13.1.1.1.2(b), III.13.1.1.1.3(b), and III.13.1.1.1.4) will be met.

- (b) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2(c) (environmental compliance), the Project Sponsor must include in the New Capacity Qualification Package: (i) a detailed description of the specific regulations that it is seeking to comply with and the permits that it must obtain; and (ii) documentation of the costs associated with the project in sufficient detail to allow the ISO to determine that the relevant cost threshold (described in Section III.13.1.1.1.2(c)) will be met.
- (c) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Sections III.13.1.1.1.2, III.13.1.1.1.3, or III.13.1.1.1.4, the Project Sponsor must include in the New Capacity Qualification Package detailed information showing how and when the resource will shed its Capacity Supply Obligation to accommodate necessary work on the facility, if necessary. The Project Sponsor must also include the shedding of its Capacity Supply Obligation as an additional milestone in the critical path schedule described in Section III.13.1.1.2.2.2.

# III.13.1.1.2.2.6. Additional Requirements for New Generating Capacity Resources that are Intermittent Power Resources and Intermittent Settlement Only Resources.

In addition to the information described elsewhere in this Section III.13.1.1.2.2, for each Intermittent Power Resource and Intermittent Settlement Only Resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must include in the New Capacity Qualification Package:

- (a) a claimed summer Qualified Capacity and a claimed winter Qualified Capacity based on the data described in Section III.13.1.1.2.2.6(b);
- (b) measured and recorded site-specific summer and winter data relevant to the expected performance of the Intermittent Power Resource and Intermittent Settlement Only Resource (including wind speed data for wind resources, water flow data for run-of-river hydropower resources, and irradiance data for solar resources) that, with the other information provided in the New Capacity Qualification Package, will enable the ISO to confirm the summer and winter Qualified Capacity that the Project Sponsor claims for the Intermittent Power Resource or the Intermittent Settlement Only Resource.

### III.13.1.1.2.3. Initial Interconnection Analysis.

- (a) For each New Generating Capacity Resource, the ISO shall perform an initial interconnection analysis, including an analysis of overlapping interconnection impacts, based on the information provided in the New Capacity Show of Interest Form and shall determine the amount of capacity that the resource could provide by the start of the associated Capacity Commitment Period. The initial interconnection analysis shall be performed consistent with the criteria and conditions described in ISO New England Planning Procedures, and will include, but will not be limited to, a power flow analysis and a short circuit analysis. No initial interconnection analysis is required where the total requested Qualified Capacity of a New Generating Capacity Resource pursuant to Sections III.13.1.1.2, III.13.1.1.3, III.13.1.1.4, or III.13.1.1.6 can be realized without a material change (as defined in Section 4.4 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff). The ISO will perform the initial interconnection analysis in the form of a group study that will include all the projects that have submitted a New Capacity Show of Interest Form to participate in the same Capacity Commitment Period (as described in Section 4.1 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff). Participation in an initial interconnection analysis is a requirement for obtaining Capacity Network Resource Interconnection Service in a manner that meets the Capacity Capability Interconnection Standard in accordance with the provisions in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff.
- (b) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide the entire amount of capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period, the New Generating Capacity Resource's Qualified Capacity values may be adjusted accordingly, as described in Section III.13.1.1.2.5.
- (c) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period and the New Generating Capacity Resource can not provide any capacity without those facilities and upgrades, the resource shall not be accepted for participation in the Forward Capacity Auction. In this case, the ISO will provide an explanation of its determination in the qualification determination notification, discussed in Section III.13.1.1.2.8.

- (d) If as a result of the initial interconnection analysis, the ISO determines that the New Generating Capacity Resource can provide all or some of the capacity indicated in the New Capacity Show of Interest Form by the start of the Capacity Commitment Period, and if the New Generating Capacity Resource is accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1, then in the qualification determination notification, discussed in Section III.13.1.1.2.8, the ISO, after consultation with the applicable Transmission Owner(s) as appropriate, shall include a list of the facilities that may be required to complete the interconnection and time required to construct those facilities by the start of the associated Capacity Commitment Period.
- (e) Where, as a result of the initial interconnection analysis, the ISO concludes, after consultation with the Project Sponsor and the applicable Transmission Owner(s), as appropriate, that the capacity indicated in the New Capacity Show of Interest Form can not be interconnected by the commencement of the Capacity Commitment Period, the Forward Capacity Market qualification process for that resource shall be terminated and the ISO will notify the Project Sponsor of such termination.
- (f) Where, as a result of the initial interconnection analysis, the ISO determines that because of overlapping interconnection impacts, New Generating Capacity Resources that are otherwise accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1 cannot provide the full amount of capacity that they each would otherwise be able to provide (in the absence of the other relevant Existing Generating Capacity Resources and New Generating Capacity Resources seeking to qualify for the Forward Capacity Auction), those New Generating Capacity Resources will be accepted for participation in the Forward Capacity Auction on the basis of their Queue Position, as described in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff, with priority given to resources that entered the queue earlier. Resources with lower priority in the queue may be accepted partially. Starting with the fourth auction, a New Generating Capacity Resource that meets the requirements of this Section III.13.1, but that would not be accepted for participation in the Forward Capacity Auction as a result of overlapping interconnection impacts with another resource having a higher priority in the queue may be accepted for participation in the Forward Capacity Auction as a Conditional Qualified New Generating Capacity Resource, as described in Section III.13.2.3.2(f), provided that the resource having a higher priority in the queue is not a resource offering capacity into the Forward Capacity Auction pursuant to Section III.13.2.3.2(e).

(g) New Generating Capacity Resources, or portions thereof, shall not be considered to have met their Capacity Supply Obligation for the purposes of this Forward Capacity Market and shall not receive compensation if any upgrades to be completed by the Project Sponsor required to remove overlapping interconnection impacts as identified in (f) have not been completed, including, any upgrades identified in a restudy pursuant to Section 3.2.1.3 of Schedule 22 and Section 1.7.1.3 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff and, if necessary, requests for the interconnection of an Elective Transmission Upgrade, in time for the Capacity Commitment Period unless the Capacity Supply Obligation is appropriately covered.

#### III.13.1.1.2.4. Evaluation of New Capacity Qualification Package.

The ISO shall review a New Generating Capacity Resource's New Capacity Qualification Package consistent with the dates set forth in Section III.13.1.10, and shall determine whether the package is complete and whether, based on the information provided, the New Generating Capacity Resource is accepted for participation in the Forward Capacity Auction. In making these determinations, the ISO may consider, but is not limited to considering, the following:

- (a) whether the New Capacity Qualification Package contains all of the elements required by this Section III.13.1.1.2;
- (b) whether the critical path schedule includes all necessary elements and is sufficiently developed;
- (c) whether the milestones in the critical path schedule are reasonable and likely to be met;
- (d) whether, in the case of a resource previously counted as a capacity resource, the requirements for treatment as a New Generating Capacity Resource are satisfied; and
- (e) whether, in the case of an Intermittent Power Resource or Intermittent Settlement Only Resource, sufficient data for confirming the resource's claimed summer and winter Qualified Capacity is provided, and whether the data provided reasonably supports the claimed summer and winter Qualified Capacity.
- III.13.1.1.2.5. Qualified Capacity for New Generating Capacity Resources.
- III.13.1.1.2.5.1. New Generating Capacity Resources Other Than Intermittent Power Resources and Intermittent Settlement Only Resources.

The summer Qualified Capacity and winter Qualified Capacity of a New Generating Capacity Resource that is not an Intermittent Power Resource or an Intermittent Settlement Only Resource that has cleared in the Forward Capacity Auction shall be based on the data provided to the ISO during the qualification process, subject to ISO review and verification, and possibly as modified pursuant to Section III.13.1.1.2.3(b). The FCA Qualified Capacity for such a resource shall be the lesser of the resource's summer Qualified Capacity and winter Qualified Capacity, as adjusted to account for applicable offers composed of separate resources.

#### III.13.1.1.2.5.2. [Reserved]

# III.13.1.1.2.5.3. New Generating Capacity Resources that are Intermittent Power Resources and Intermittent Settlement Only Resources.

The summer Qualified Capacity and winter Qualified Capacity of a New Generating Capacity Resource that is an Intermittent Power Resource or an Intermittent Settlement Only Resource shall be the summer Qualified Capacity and winter Qualified Capacity claimed by the Project Sponsor pursuant to Section III.13.1.1.2.2.6, as confirmed by the ISO pursuant to Section III.13.1.1.2.4(e). The FCA Qualified Capacity for such a resource shall be equal to the resource's summer Qualified Capacity, as adjusted to account for applicable offers composed of separate resources.

# III.13.1.1.2.5.4. New Generating Capacity Resources Partially Clearing in a Previous Forward Capacity Auction.

Where, as discussed in Section III.13.1.1.1.1(c), a New Generating Capacity Resource was accepted for participation in a previous Forward Capacity Auction, but cleared less than its summer or winter Qualified Capacity in that previous Forward Capacity Auction and is having its critical path schedule monitored by the ISO as described in Section III.13.3, its summer and winter Qualified Capacity as a New Generating Capacity Resource in the instant Forward Capacity Auction shall be the summer and winter Qualified Capacity from the previous Forward Capacity Auction minus the amount of capacity clearing from the New Generating Capacity Resource in the previous Forward Capacity Auction. The FCA Qualified Capacity for such a resource shall be the lesser of the resource's summer Qualified Capacity and winter Qualified Capacity, as adjusted to account for applicable offers composed of separate resources. The amount of capacity clearing in a Forward Capacity Auction from a New Generating Capacity Resource shall be treated as an Existing Generating Capacity Resource in subsequent Forward Capacity Auctions.

### III.13.1.1.2.6. [Reserved.]

### III.13.1.1.2.7. Opportunity to Consult with Project Sponsor.

In its review of a New Capacity Show of Interest Form or a New Capacity Qualification Package, the ISO may consult with the Project Sponsor to seek clarification, to gather additional necessary information, or to address questions or concerns arising from the materials submitted. At the discretion of the ISO, the ISO may consider revisions or additions to the qualification materials resulting from such consultation; provided, however, that in no case shall the ISO consider revisions or additions to the qualification materials if the ISO believes that such consideration cannot be properly accomplished within the time periods established for the qualification process. In addition, the ISO or the Project Sponsor may confer to seek clarification, to gather additional necessary information, or to address questions or concerns prior to the ISO's final determination and notification of qualification.

# III.13.1.1.2.8. Qualification Determination Notification for New Generating Capacity Resources.

No later than 127 days before the Forward Capacity Auction, the ISO shall send notification to Project Sponsors or Market Participants, as applicable, for each New Generating Capacity Resource indicating:

- (a) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the initial interconnection analysis made pursuant to Section III.13.1.1.2.3, and if not accepted, an explanation of the reasons the New Generating Capacity Resource was not accepted in the initial interconnection analysis;
- (b) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the New Capacity Qualification Package evaluation made pursuant to Section III.13.1.1.2.4, and if not accepted, an explanation of the reasons the New Generating Capacity Resource's New Capacity Qualification Package was not accepted;
- (c) if accepted for participation in the Forward Capacity Auction, a list of the facilities that may be required to complete the interconnection for purposes of providing capacity and time required to construct those facilities by the start of the associated Capacity Commitment Period, as discussed in Section III.13.1.1.2.3(d);

- (d) if accepted for participation in the Forward Capacity Auction, the New Generating Capacity Resource's summer Qualified Capacity and winter Qualified Capacity, as determined pursuant to Section III.13.1.1.2.5;
- (e) if accepted for participation in the Forward Capacity Auction, but subject to the provisions of Section III.13.1.1.2.3(f) (where not all New Generating Capacity Resources can be interconnected due to their combined effects on the New England Transmission System), a description of how the New Generating Capacity Resource shall participate in the Forward Capacity Auction, including, for the fourth and future auctions: (i) whether the resource shall participate as a Conditional Qualified New Generating Capacity Resource; (ii) for the notification to a Conditional Qualified New Generating Capacity Resource, the Queue Position of the associated resource with higher queue priority; and (iii) for the notification to a resource with higher queue priority than a Conditional Qualified New Generating Capacity Resource; the Queue Position of the Conditional Qualified New Generating Capacity Resource; and
- (f) if accepted for participation in the Forward Capacity Auction and requesting to submit offers at prices below the relevant Offer Review Trigger Price pursuant to Section III.13.1.1.2.2.3, the Internal Market Monitor's determination regarding whether the requested offer price is consistent with the long run average costs of that New Generating Capacity Resource.

#### III.13.1.2. Existing Generating Capacity Resources.

An Existing Generating Capacity Resource, as defined in Section III.13.1.2.1, may participate in the Forward Capacity Auction pursuant to the provisions of this Section III.13.1.2.

### III.13.1.2.1. Definition of Existing Generating Capacity Resource.

Any resource that does not satisfy the criteria for participating in the Forward Capacity Auction as a New Generating Capacity Resource (Section III.13.1.1), as an Existing Import Capacity Resource or New Import Capacity Resource (Section III.13.1.3), or as a New Demand Resource or Existing Demand Resource (Section III.13.1.4) shall be an Existing Generating Capacity Resource.

- III.13.1.2.2. Qualified Capacity for Existing Generating Capacity Resources.
- III.13.1.2.2.1. Existing Generating Capacity Resources Other Than Intermittent Power Resources and Intermittent Settlement Only Resources.

#### III.13.1.2.2.1.1. Summer Qualified Capacity.

The summer Qualified Capacity of an Existing Generating Capacity Resource that is not an Intermittent Power Resource or an Intermittent Settlement Only Resource shall be equal to the median of that Existing Generating Capacity Resource's summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in October of each year, with only positive summer ratings included in the median calculation. For the first Forward Capacity Auction, the summer Qualified Capacity of an Existing Generating Capacity Resource shall be equal to the median of that Existing Generating Capacity Resource's summer Seasonal Claimed Capability ratings from the most recent four years, as of the fifth Business Day in October of each year, with only positive summer ratings included in the median calculation. Where an Existing Generating Capacity Resource has fewer than five summer Seasonal Claimed Capability ratings, or in the case of the first Forward Capacity Auction, fewer than four summer Seasonal Claimed Capability ratings, then the summer Qualified Capacity for that Existing Generating Capacity Resource shall be equal to the median of all of that Existing Generating Capacity Resource's previous summer Seasonal Claimed Capability ratings, as of the fifth Business Day in October of each year, with only positive summer ratings included in the median calculation. If for an Existing Generating Capacity Resource there are no previous positive summer Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation, then the Existing Generating Capacity Resource's summer Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

#### III.13.1.2.2.1.2. Winter Qualified Capacity.

The winter Qualified Capacity of an Existing Generating Capacity Resource that is not an Intermittent Power Resource or an Intermittent Settlement Only Resource shall be equal to the median of that Existing Generating Capacity Resource's winter Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in June of each year, with only positive winter ratings included in the median calculation. For the first Forward Capacity Auction, the winter Qualified Capacity of an Existing Generating Capacity Resource's winter Seasonal Claimed Capability ratings from the most recent four years, as of the fifth Business Day in June of each year, with only positive winter ratings included in the median calculation. Where an Existing Generating Capacity Resource has fewer than five winter Seasonal Claimed Capability ratings, or in the case of the first Forward Capacity Auction, fewer than four winter Seasonal Claimed Capability ratings, then the winter Qualified Capacity for that Existing Generating Capacity Resource

shall be equal to the median of all of that Existing Generating Capacity Resource's previous winter Seasonal Claimed Capability ratings, as of the fifth Business Day in June of each year, with only positive winter ratings included in the median calculation. If for an Existing Generating Capacity Resource there are no previous positive winter Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation, then the Existing Generating Capacity Resource's winter Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

# III.13.1.2.2.2. Existing Generating Capacity Resources that are Intermittent Power Resources and Intermittent Settlement Only Resources.

Intermittent Power Resources and Intermittent Settlement Only Resources are defined as wind, solar, run of river hydro and other renewable resources that do not have control over their net power output. Wind and solar resources shall be qualified as Intermittent Power Resources or Intermittent Settlement Only Resources. The summer and winter Qualified Capacity for an Existing Generating Capacity Resource that is an Intermittent Power Resource or Intermittent Settlement Only Resource shall be calculated as follows:

# III.13.1.2.2.2.1. Summer Qualified Capacity for an Intermittent Power Resource and Intermittent Settlement Only Resource.

- (a) With regard to any Forward Capacity Auction, for each of the previous five summer periods, the ISO shall determine the median of the Intermittent Power Resource's and Intermittent Settlement Only Resource's net output in the Summer Intermittent Reliability Hours. If the Intermittent Power Resource or Intermittent Settlement Only Resource has not been in Commercial Operation for the requisite five full summer periods, the ISO shall determine the median of the Intermittent Power Resource's net output in each of the previous summer periods, or portion thereof if the Intermittent Power Resource or Intermittent Settlement Only Resource achieved Commercial Operation during a summer period. If the Intermittent Power Resource or Intermittent Settlement Only Resource began Commercial Operation after the 2006 summer period and prior to the first Forward Capacity Auction, its summer Qualified Capacity shall be established pursuant to Section III.13.1.1.2.2.6, as confirmed by the ISO pursuant to Section III.13.1.1.2.4(e).
- (b) The Intermittent Power Resource's or Intermittent Settlement Only Resource's summer Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.1(a).

- (c) The Summer Intermittent Reliability Hours shall be hours ending 1400 through 1800 each day of the summer period (June through September) and all summer period hours in which the ISO has declared a system-wide Shortage Event and if the Intermittent Power Resource or Intermittent Settlement Only Resource was in an import-constrained Capacity Zone, all Shortage Events in that Capacity Zone.
- (d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource or an Intermittent Settlement Only Resource there are no previous positive summer Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation, then the Existing Generating Capacity Resource's summer Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

# III.13.1.2.2.2.2. Winter Qualified Capacity for an Intermittent Power Resource and Intermittent Settlement Only Resources.

- (a) With regard to any Forward Capacity Auction, for each of the previous five winter periods, the ISO shall determine the median of the Intermittent Power Resource's and Intermittent Settlement Only Resource's net output in the Winter Intermittent Reliability Hours. If the Intermittent Power Resource or Intermittent Settlement Only Resource has not been in Commercial Operation for the requisite five full winter periods, the ISO shall determine the median of the Intermittent Power Resource's and Intermittent Settlement Only Resource's net output in each of the previous winter periods, or portion thereof if the Intermittent Power Resource or Intermittent Settlement Only Resource achieved Commercial Operation during a winter period.
- (b) The Intermittent Power Resource's and Intermittent Settlement Only Resource's winter Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.2(a).
- (c) The Winter Intermittent Reliability Hours shall be hours ending 1800 and 1900 each day of the winter period (October through May) and all winter period hours in which the ISO has declared a system-wide Shortage Event and if the Intermittent Power Resource or Intermittent Settlement Only Resource was in an import-constrained Capacity Zone, all Shortage Events in that Capacity Zone.
- (d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource or an Intermittent Settlement Only Resource there are no previous positive winter Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation,

then the Existing Generating Capacity Resource's winter Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

# III.13.1.2.2.3. Qualified Capacity Adjustment for Partially New and Partially Existing Resources.

- (a) Where an Existing Generating Capacity Resource is associated with a New Generating Capacity Resource that was accepted for participation in a previous Forward Capacity Auction qualification process and that cleared in a previous Forward Capacity Auction, then in each subsequent Forward Capacity Auction until the New Generating Capacity Resource achieves Commercial Operation the summer Qualified Capacity of that Existing Generating Capacity Resource shall be the sum of [the median of that Existing Generating Capacity Resource's positive summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day of October of each year, calculated in a manner consistent with Section III.13.1.2.2.1.1] plus [the amount of the New Generating Capacity Resource's capacity clearing in previous Forward Capacity Auctions]. After the New Generating Capacity Resource's summer Qualified Capacity shall be calculated as described in Section III.13.1.2.2.1.1, except that no data from the time period prior to the New Generating Capacity Resource's Commercial Operation date shall be used to determine the summer Qualified Capacity associated with the Existing Generating Capacity Resource.
- (b) Where an Existing Generating Capacity Resource is associated with a New Generating Capacity Resource that was accepted for participation in a previous Forward Capacity Auction qualification process and that cleared in a previous Forward Capacity Auction, then in each subsequent Forward Capacity Auction until the New Generating Capacity Resource achieves Commercial Operation the winter Qualified Capacity of that Existing Generating Capacity Resource shall be the sum of [the median of that Existing Generating Capacity Resource's positive winter Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day of June of each year, calculated in a manner consistent with Section III.13.1.2.2.1.2] plus [the amount of the New Generating Capacity Resource's capacity clearing in previous Forward Capacity Auctions]. After the New Generating Capacity Resource achieves Commercial Operation, the Existing Generating Capacity Resource's winter Qualified Capacity shall be calculated as described in Section III.13.1.2.2.1.2, except that no data from the time period prior to the New Generating Capacity Resource's Commercial Operation date shall be used to determine the winter Qualified Capacity associated with the Existing Generating Capacity Resource.

# III.13.1.2.2.4. Adjustment for Significant Decreases in Capacity Prior to the Existing Capacity Qualification Deadline.

Where the most recent summer Seasonal Claimed Capability, as of the fifth Business Day in October, of an Existing Generating Capacity Resource that is not a Settlement Only Resource, Intermittent Power Resource, or Intermittent Settlement Only Resource is below its summer Qualified Capacity, as determined pursuant to Section III.13.1.2.2.1.1, by more than the lesser of 20 percent of that summer Qualified Capacity or 40 MW, then the Lead Market Participant must elect one of the three treatments described in this Section III.13.1.2.2.4 by the Existing Capacity Qualification Deadline. If the Lead Market Participant makes no election, or elects treatment pursuant to Section III.13.1.2.2.4(b) or Section III.13.1.2.2.4(c) and fails to meet the associated requirements, then the treatment described in Section III.13.1.2.2.4(a) shall apply.

- (a) A Lead Market Participant may elect, for the purposes of the Forward Capacity Auction only, to have the Existing Generating Capacity Resource's summer Qualified Capacity set to the most recent summer Seasonal Claimed Capability as of the fifth Business Day in October, provided that the Lead Market Participant has furnished evidence regarding the cause of the de-rating.
- (b) A Lead Market Participant may elect: (i) to submit a Static De-List Bid or a Permanent De-List Bid for the difference between the summer Qualified Capacity calculated pursuant to Section III.13.1.2.2.1.1 and the most recent summer Seasonal Claimed Capability as of the fifth Business Day in October; and (ii) to have the Existing Generating Capacity Resource's summer Qualified Capacity remain as calculated pursuant to Section III.13.1.2.2.1.1 for the Forward Capacity Auction.
- (c) A Lead Market Participant may elect: (i) to submit a critical path schedule as described in Section III.13.1.1.2.2.2, modified as appropriate, describing the measures that will be taken and showing that the Existing Generating Capacity Resource will be able to provide an amount of capacity consistent with the summer Qualified Capacity as calculated pursuant to Section by the start of the relevant Capacity Commitment Period; and (ii) to have the Existing Generating Capacity Resource's summer Qualified Capacity remain as calculated pursuant to Section for the Forward Capacity Auction. For an Existing Generating Capacity Resource subject to this election, the critical path schedule monitoring provisions of Section III.13.3 shall apply.

#### III.13.1.2.2.5. Adjustment for Certain Significant Increases in Capacity.

Where an Existing Generating Capacity Resource that is not a Settlement Only Resource, meets the requirements of Section III.13.1.1.1.3(a) but not the requirements of Section III.13.1.1.1.3(b), the Lead Market Participant may elect to have the Existing Generating Capacity Resource's summer Qualified Capacity be the sum of [the median of that Existing Generating Capacity Resource's positive summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in October of each year, calculated in a manner consistent with Section III.13.1.2.2.1.1] plus [the amount of incremental capacity as described in Section III.13.1.1.3(a)]; provided, however, that the Lead Market Participant must abide by all other provisions of this Section III.13 applicable to a resource that is a New Generating Capacity Resource pursuant to Section III.13.1.1.1.3. Such an election must be made in writing and must be received by the ISO no later than 10 Business Days before the Existing Capacity Qualification Deadline.

#### III.13.1.2.2.5.1. [Reserved.]

III.13.1.2.2.5.2. Requirements for an Existing Generating Capacity Resource, Existing

Demand Resource or Existing Import Capacity Resource Having a Higher

Summer Qualified Capacity than Winter Qualified Capacity.

Where an Existing Generating Capacity Resource, Existing Demand Resource, or Existing Import Capacity Resource (other than an Intermittent Power Resource or an Intermittent Settlement Only Resource) has a summer Qualified Capacity that exceeds, by the threshold specified below, its winter Qualified Capacity, both as calculated pursuant to this Section III.13.1.2.2, then that resource must either: (i) offer its summer Qualified Capacity as part of an offer composed of separate resources, as discussed in Section III.13.1.5; or (ii) submit a Static De-List Bid or a Permanent De-List Bid in an Existing Capacity Qualification Package for at least the difference between the summer Qualified Capacity and the winter Qualified Capacity, at the Forward Capacity Auction Starting Price. If the Lead Market Participant makes no election, the ISO shall submit a Static De-List Bid on behalf of the resource (with all payments, charges, rights, obligations, and other results associated with such bid applying to the resource as if the resource itself had submitted the bid) for the difference between the resource's summer Qualified Capacity and the winter Qualified Capacity at the Forward Capacity Auction Starting Price. The Internal Market Monitor shall review each bid made pursuant to this Section III.13.1.2.2.5.2, and if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)). Bids made pursuant to this Section III.13.1.2.2.5.2 shall be subject to a reliability review as described in Section

III.13.2.5.2.5, as required. This Section III.13.1.2.2.5.2 shall not apply if the summer Qualified Capacity of a resource is greater than the winter Qualified Capacity of that resource by less than the lesser of: (i) 2 MW, or (ii) two percent of the summer Qualified Capacity of that resource.

#### III.13.1.2.3. Qualification Process for Existing Generating Capacity Resources.

For each Existing Generating Capacity Resource, no later than 15 Business Days before the Existing Capacity Qualification Deadline, the ISO will notify the resource's Lead Market Participant of the resource's summer Qualified Capacity and winter Qualified Capacity and the Load Zone in which the Existing Generating Capacity Resource is located. If the Lead Market Participant believes that an ISO-determined summer Qualified Capacity or winter Qualified Capacity for an Existing Generating Capacity Resource does not accurately reflect the determination described in Section III.13.1.2.2, then the Lead Market Participant must notify the ISO within 5 Business Days of receipt of the Qualified Capacity notification. The ISO shall notify the Lead Market Participant of the outcome of any such challenge no later than 5 Business Days before the Existing Capacity Qualification Deadline. If an Existing Generating Capacity Resource does not submit a Static De-List Bid, an Export Bid, an Administrative Export De-List Bid, or a Permanent De-List Bid in the Forward Capacity Auction qualification process, then the resource shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c).

#### III.13.1.2.3.1. Existing Capacity Qualification Package.

A resource that previously has been deactivated pursuant Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and seeks to reactivate and participate in the Forward Capacity Market as an Existing Generating Capacity Resource must submit a reactivation plan no later than 10 Business Days before the Existing Capacity Qualification Deadline, as described in Section III.13.1.1.1.6(b). All Static De-List Bids, Export Bids, Administrative Export De-List Bids, and Permanent De-List Bids in the Forward Capacity Auction must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, as described in this Section III.13.1.2.3.1. All Static De-List Bids, Permanent De-List Bids, Export Bids, and Administrative Export De-List Bids submitted in the qualification process may not be modified or withdrawn after the Existing Capacity Qualification Deadline, and if accepted by the ISO shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). An Existing Generating Capacity Resource may not submit a Static De-List Bid, Export Bid, Administrative Export De-List Bid, or Permanent De-List Bid for an amount of capacity greater than its summer Qualified Capacity. Where a resource elected pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.2.2.5 to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period

associated with the Forward Capacity Auction in which the offer clears, the capacity associated with any resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply. For a single resource, a Lead Market Participant may combine a Static De-List Bid, an Export Bid, and an Administrative Export De-List Bid; a Permanent De-List Bid may not be combined with any other type of de-list or export bid. All Static De-List Bids and Permanent De-List Bids submitted under Section III.13.1.2.2.4(b) associated with a significant decrease in capacity must be identified in the Existing Capacity Qualification Package.

Static De-List Bids, Export Bids and Permanent De-List Bids may elect to be rationed (as described in Section III.13.2.6, however, an Export Bid is always subject to potential rationing where the associated external interface binds). Where a Lead Market Participant submits any combination of Static De-List Bid and Export Bid for a single resource, each of those bids must have the same rationing election. Where a Lead Market Participant submits any combination of Static De-List Bid, Export Bid, and Administrative Export De-List Bid for a single resource, none of the prices in a set of price-quantity pairs associated with a bid may be the same as any price in any other set of price-quantity pairs associated with another bid for the same resource.

#### III.13.1.2.3.1.1. Static De-List Bids.

An Existing Generating Capacity Resource, or a portion thereof, seeking to opt out of the capacity market at prices at or above \$1.00/kW-month during a single Capacity Commitment Period may submit a Static De-List Bid in the associated Forward Capacity Auction. A Static De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. Each Static De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five price-quantity pairs) associated with a specific Existing Generating Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. All Static De-List Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Static De-List Bids are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional documentation described in that section. With the submission of a Static De-List Bid, the Existing Generating Capacity Resource must notify the ISO if the resource will not be participating in the energy and ancillary services

markets during the Capacity Commitment Period (except for necessary audits or tests). Static De-List Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).

#### III.13.1.2.3.1.2. Permanent De-List Bids.

An Existing Generating Capacity Resource seeking to opt out of the capacity market permanently beginning at the start of a particular Capacity Commitment Period may submit a Permanent De-List Bid in the associated Forward Capacity Auction. A Permanent De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits a Permanent De-List Bid for the resource's full summer Qualified Capacity. Each Permanent De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five pricequantity pairs) associated with a specific Existing Generating Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. All Permanent De-List Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Permanent De-List Bids above \$1.00/kW-month are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional documentation described in that section. With the submission of a Permanent De-List Bid, the Existing Generating Capacity Resource must notify the ISO if the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period and thereafter. Permanent De-List Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b). A resource whose Permanent De-List Bid clears in the Forward Capacity Auction is precluded from subsequent participation in the Forward Capacity Market unless it qualifies as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2.

### **III.13.1.2.3.1.3. Export Bids.**

An Existing Generating Capacity Resource within the New England Control Area other than an Intermittent Power Resource or an Intermittent Settlement Only Resource seeking to export all or part of its capacity during a Capacity Commitment Period may submit an Export Bid in the associated Forward Capacity Auction. An Export Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. All Export Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Export Bids above \$1.00/kW-month are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional information described in that Section. Each Export Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form

of a curve (up to five price-quantity pairs) associated with a specific Existing Generating Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. Each price-quantity pair must be less than the Forward Capacity Auction Starting Price. The Existing Capacity Qualification Package for each Export Bid must also specify the interface over which the capacity will be exported. Export Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).

#### III.13.1.2.3.1.4. Administrative Export De-List Bids.

An Existing Generating Capacity Resource other than an Intermittent Power Resource or an Intermittent Settlement Only Resource subject to a multiyear contract to sell capacity outside of the New England Control Area during the Capacity Commitment Period that either: (i) cleared as an Export Bid in a previous Forward Capacity Auction for a Capacity Commitment Period within the duration of the contract; or (ii) entered into a contract prior to April 30, 2007 to sell capacity outside of the New England Control Area during the Capacity Commitment Period, may submit an Administrative Export De-List Bid in the associated Forward Capacity Auction. An Administrative Export De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. Unless reviewed as an Export Bid in a previous Forward Capacity Auction, an Administrative Export De-List Bid is subject to a reliability review prior to clearing in a Forward Capacity Auction, as described in Section III.13.2.5.2.5, and is subject to review by the Internal Market Monitor in the first Forward Capacity Auction in which it participates, pursuant to Section III.13.1.7. Both the reliability review and the review by the Internal Market Monitor shall be conducted once and shall remain valid for the multiyear contract period. Each Administrative Export De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, must be associated with a specific Existing Generating Capacity Resource, and must indicate the quantity of capacity subject to the bid. The Existing Capacity Qualification Package for each Administrative Export De-List Bid must also specify the interface over which the capacity will be exported, and must include documentation demonstrating a contractual obligation to sell capacity outside of the New England Control Area during the whole Capacity Commitment Period. Administrative Export De-List Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).

### III.13.1.2.3.1.5. Non-Price Retirement Request

### III.13.1.2.3.1.5.1. Description of Non-Price Retirement Request.

A Non-Price Retirement Request is a binding request to retire all or part of a Generating Capacity Resource. Non-Price Retirement Requests will be approved subject to review for reliability impacts under Section III.13.2.5.2.5. Even if not approved, a resource that has submitted a Non-Price Retirement Request may retire in whole or in part, as applicable, pursuant to Section III.13.2.5.2.5.3(a)(iii). Once submitted, a Non-Price Retirement Request may not be withdrawn. A Non-Price Retirement Request supersedes any prior de-list bid for the same Capacity Commitment Period.

### III.13.1.2.3.1.5.2. Timing Requirements.

The request must be submitted to the ISO between the Existing Capacity Qualification Deadline and 120 days prior to the date of the relevant Forward Capacity Auction. In the case of a resource that has a Permanent De-List Bid rejected by the Internal Market Monitor, a Non-Price Retirement Request may be submitted within 14 days after the resource receives notice of the rejection or 120 days prior to the date of the relevant Forward Capacity Auction, whichever is later.

# III.13.1.2.3.1.5.3. Reliability Review of Non-Price Retirement Requests.

The ISO will review a Non-Price Retirement Request pursuant to Section III.13.2.5.2.5 to determine if the resource is needed for reliability. If the Non-Price Retirement Request is rejected for reliability reasons and the resource elects not to proceed with retirement as provided in Section III.13.2.5.2.5.3(a)(iii), and the resource remains in operation to meet the reliability need, the resource will be compensated pursuant to Section III.13.2.5.2.5.1(c). Upon resolution of the reliability issue, the Non-Price Retirement Request will be approved and the resource, or portion thereof, as applicable, will retire pursuant to Section III.13.1.2.3.1.5.4.

## III.13.1.2.3.1.5.4. Obligation to Retire.

A Generating Capacity Resource, or portion thereof, with an approved Non-Price Retirement Request will be retired as described in Section III.13.2.5.2.5.3(a) unless, in the case of a Generating Capacity Resource that had its Non-Price Retirement Request rejected for reliability reasons, the Commission directs that the obligation to retire be removed or the retirement date extended as part of an Incremental Cost of Reliability Service filing made pursuant to Section III.13.2.5.2.5.2.

# III.13.1.2.3.1.6. Static De-List Bids and Permanent De-List Bids for Existing Generating Capacity Resources at Stations having Common Costs.

Where Existing Generating Capacity Resources at a Station having Common Costs elect to submit Static De-List Bids or Permanent De-List Bids, the provisions of this Section III.13.1.2.3.1.6 shall apply.

#### III.13.1.2.3.1.6.1. Submission of Cost Data.

In addition to the information required elsewhere in this Section III.13.1.2.3, Static De-List Bids or Permanent De-List Bids submitted by an Existing Generating Capacity Resource that is associated with a Station having Common Costs and seeking to delist must include detailed cost data to allow the ISO to determine the Asset-Specific Going Forward Costs for each asset associated with the Station and the Station Going Forward Common Costs.

#### III.13.1.2.3.1.6.2. [Reserved.]

#### III.13.1.2.3.1.6.3. Internal Market Monitor Review.

The Internal Market Monitor will review each Static De-List Bid and Permanent De-List Bid from an Existing Generating Capacity Resource that is associated with a Station having Common Costs pursuant to the following methodology:

- (i) Calculate the average Asset-Specific Going Forward Costs of each asset at the Station.
- (ii) Order the assets from highest average Asset-Specific Going Forward Costs to lowest average Asset-Specific Going Forward Costs; this is the preferred de-list order.
- (iii) Calculate and assign to each asset a station cost that is equal to the average cost of the assets remaining at the Station, including Station Going Forward Common Costs, assuming the successive delisting of each individual asset in preferred de-list order.
- (iv) Calculate a set of composite costs that is equal to the maximum of the cost associated with each asset as calculated in (i) and (iii) above.

The Internal Market Monitor will adjust the set of composite costs to ensure a monotonically non-increasing set of bids as follows: any asset with a composite cost that is greater than the composite cost of the asset with the lowest composite cost and that has average Asset-Specific Going Forward Costs that are less than its composite costs will have its composite cost set equal to that of the asset with the lowest composite cost. The bids of the asset with the lowest composite cost and of any assets whose composite

costs are so adjusted will be considered a single non-rationable bid for use in the Forward Capacity Auction.

The Internal Market Monitor will compare a de-list bid developed using the adjusted composite costs to the de-list bid submitted by the Existing Generating Capacity Resource that is associated with a Station having Common Costs. If the Internal Market Monitor determines that the submitted de-list bid is less than or equal to the bid developed using the adjusted composite costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). If the Internal Market Monitor determines that the submitted de-list bid is greater than the bid developed using the adjusted composite costs or is not consistent with the submitted supporting cost data, then the Internal Market Monitor will reject the bid as described in Section III.13.1.2.3.2.1.1.

# III.13.1.2.3.2. Review by Internal Market Monitor of Bids from Existing Generating Capacity Resources.

# III.13.1.2.3.2.1. Static De-List Bids, Export Bids Above \$1.00/kW-month, and Permanent De-List Bids Above \$1.00/kW-month.

The Internal Market Monitor shall review each Static De-List Bid, each Export Bid above \$1.00/kW-month, and each Permanent De-List Bid above \$1.00/kW-month to determine whether the bid is consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward costs (as determined pursuant to Section III.13.1.2.3.2.1.1) and opportunity costs (as determined pursuant to Section III.13.1.2.3.2.1.2). Sufficient documentation and information must be included in the Existing Capacity Qualification Package to allow the Internal Market Monitor to make such determinations. Any Existing Generating Capacity Resource submitting a Static De-List, Permanent De-List Bid, or Export Bid shall report costs using ISO spreadsheets and forms provided, and may supplement this information with other evidence as deemed necessary. The entire de-list submittal shall be accompanied by an affidavit executed by a corporate officer attesting to the accuracy of the reported costs and the reasonableness of the estimates and adjustments of costs that would otherwise be avoided if the resource were not required to meet the obligations of a listed resource, and shall be subject to audit upon request by the ISO.

### III.13.1.2.3.2.1.1. Internal Market Monitor Review of De-List Bids.

The Internal Market Monitor may seek additional information from the Lead Market Participant after the qualification deadline to address any questions or concerns regarding the data submitted, as appropriate.

#### III.13.1.2.3.2.1.1.1. Review of Permanent De-List Bids and Export Bids.

In the case of a Permanent De-List Bid or an Export Bid, if the Internal Market Monitor determines that the bid is consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward and opportunity costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). If the Internal Market Monitor determines, after due consideration and consultation with the Lead Market Participant, as appropriate, that the bid is not consistent with the resource's net risk-adjusted going forward and opportunity costs, then the bid will be rejected. Where a de-list bid is rejected pursuant to this Section III.13.1.2.3.2.1.1.1, both the qualification determination notification described in Section III.13.1.2.4 and the informational filing made to the Commission as described in Section III.13.8.1(a) shall include an explanation of the reasons that the de-list bid was rejected based on the Internal Market Monitor review and the resource's net risk- adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor. The Lead Market Participant for such a resource may elect to have the ISO-determined bid entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b) by so indicating in a filing with the Commission in response to the informational filing described in Section III.13.8.1(a). Such a filing, and notification to the ISO of any such election, shall be made in accordance with the terms of Section III.13.8.1(b) and shall not limit the other rights provided under that section. A Lead Market Participant making such an election shall be prohibited from challenging pursuant to Section III.13.8.1(b) the Internal Market Monitor's determinations regarding the resource's net risk-adjusted going forward costs and opportunity costs. If no such election is made, the Existing Generating Capacity Resource will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c) or as otherwise directed by the Commission. In no case shall rejection of a de-list bid by the Internal Market Monitor restrict the ability of the resource to dynamically de-list at prices below \$1.00/kW-month.

#### III.13.1.2.3.2.1.1.2. Review of Static De-List Bids.

(a) In the case of a Static De-List Bid, if the Internal Market Monitor determines that the bid is consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward and opportunity costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b); provided however, that no later than 7 days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.2.4, the Lead Market Participant may elect to: (i) withdraw the Static De-List Bid entirely, in which case the Existing Generating Capacity Resource will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c); or (ii) submit revised prices for the Static De-List Bid for the resource at

prices equal to or less than the highest price indicated in the initial Static De-List Bid as approved by the Internal Market Monitor and greater than \$1.00/kW-month. Where revised prices are submitted, the Static De-List Bid must nonetheless comply with the requirements of Section III.13.1.2.3.1.1. In no case shall withdrawal of a Static De-List Bid pursuant to this subsection restrict the ability of the resource to dynamically de-list at prices below \$1.00/kW-month.

(b) In the case of a Static De-List Bid, if the Internal Market Monitor determines, after due consideration and consultation with the Lead Market Participant, as appropriate, that the bid is not consistent with the resource's net risk-adjusted going forward and opportunity costs, then the bid will be rejected. Where a de-list bid is rejected pursuant to this Section III.13.1.2.3.2.1.1.2(b), both the qualification determination notification described in Section III.13.1.2.4 and the informational filing made to the Commission as described in Section III.13.8.1(a) shall include an explanation of the reasons that the de-list bid was rejected based on the Internal Market Monitor review and the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor. In such a case, no later than 7 days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.2.4, the Lead Market Participant may elect to submit revised prices for the Static De-List Bid for the resource at prices equal to or less than the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor and greater than \$1.00/kW-month. Where revised prices are submitted, the Static De-List Bid must nonetheless comply with the requirements of Section III.13.1.2.3.1.1. A Lead Market Participant making such an election shall be prohibited from challenging pursuant to Section III.13.8.1(b) the Internal Market Monitor's determinations regarding the resource's net risk-adjusted going forward costs and opportunity costs. If no such election is made, the Existing Generating Capacity Resource will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c) or as otherwise directed by the Commission. If no such election is made, and the Existing Generating Capacity Resource is entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c), then nothing in this subsection shall restrict the ability of the resource to dynamically de-list at prices below \$1.00/kW-month.

### III.13.1.2.3.2.1.2. Net Risk-Adjusted Going Forward Costs.

A Static De-List Bid, Export Bid above \$1.00/kW-month, or Permanent De-List Bid above \$1.00/kW-month shall be considered consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward costs based on a review of the data submitted in the following formula. To the extent

possible, all costs and operational data used in this calculation shall be the cumulative actual data for the Existing Generating Capacity Resource from the most recent full Capacity Commitment Period available.

$$\underbrace{\left[\begin{array}{c} GFC \\ \blacktriangleleft A \end{array}\right] + \left[\begin{array}{c} RF \end{array}\right] + \left[\begin{array}{c} MR - PER \end{array}\right] \times InfIndex}_{CQ_{Summer}}$$

Where:

GFC = annual going forward costs, in dollars. These are costs that might otherwise be avoided or not incurred if the resource were not subject to the obligations of a listed capacity resource during the Capacity Commitment Period (i.e., maintaining a constant condition of being ready to respond to commitment and dispatch orders). Costs that are not avoidable in a single Capacity Commitment Period and costs associated with the production of energy are not to be included. Service of debt is not a going forward cost. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only in the absence of a Capacity Supply Obligation may be included. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only if the resource were not participating in the energy and ancillary services markets may not be included, except in the case of a resource that has indicated in the submission of a Static De-List Bid or Permanent De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period (and thereafter, in the case of a Permanent De-List Bid). These costs shall be reported to the ISO using the spreadsheet provided on the ISO website by any Existing Generating Capacity Resource submitting a Static De-List, Permanent De-List Bid, or Export Bid, shall be accompanied by a signed affidavit, and shall be subject to audit upon request by the ISO. To the extent that the Capacity Commitment Period data used to calculate these data do not reflect known and measurable costs that would or are likely to be incurred in the relevant Capacity Commitment Period, the Internal Market Monitor shall also consider adjustments submitted, provided the costs are based on known and measurable conditions and supported by appropriate documentation to reflect those costs.

 $CQ_{Summer}kW$  = capacity seeking to de-list in kW. In no case shall this value exceed the resource's summer Qualified Capacity.

RF = risk factor, in dollars. This value shall be calculated using the following formula:

 $RF = [(RPC \ x \ EFORd) + (P \ x \ (Forward \ Capacity \ Auction \ Starting \ Price - AFCAP) \ x \ 12,months)] \ x \ CQ_{Summer}kW$ 

Provided: If EFORd is greater than 0.40 then 0.40 shall be used, and if EFORd is less than 0.05 then 0.05 shall be used.

EFORd shall be for the corresponding period used in quantifying going forward costs and shall be calculated using reported availability data (GADS) for the Existing Generating Capacity Resource.

RPC = replacement power costs rate, in dollars/kW. As soon as practicable, this value shall be determined by the ISO by comparing the PER Proxy Unit's daily price to the resource's Real-Time nodal price. For each hour that the resource's nodal price exceeds the PER Proxy Unit's daily price, the RPC rate for that hour will be the difference between the nodal price and the PER Proxy Unit's daily price. For each Capacity Commitment Period, the annual RPC rate will then be the sum of all hourly RPC values. The RPC rate used in the RF equation shall then be the average of the annual RPC rates for the three most recent Capacity Commitment Periods. The Lead Market Participant may specify two of the three years to be averaged. Upon exercising such option, the RPC value used shall be an average of the RPC values for the two years selected, provided however that if the Lead Market Participant selects two of three years for the PER values, the same years must be selected for the PER values for both calculations.

P = Probability estimate of a significant decrease in capacity as specified in Section III.13.4.2.1.3 occurring after the de-list bid submittal deadline and before the last annual reconfiguration auction prior to the Capacity Commitment Period. This estimate shall be no greater than the EFORd of the resource for the corresponding period used in quantifying going forward costs, and in no case greater than 0.40. The Lead Market Participant is required to provide an explanation of the derivation of the probability estimate.

AFCAP = Average FCA Price, in \$/kWmo. This value shall be the average of the last three Forward Capacity Auction clearing prices in the resource's Capacity Zone.

AA = availability adjustment. AA = (1 - EFORd)

Provided: If EFORd is greater than 0.40 then 0.40 shall be used, and if EFORd is less than 0.05 then 0.05 shall be used.

EFORd shall be for the corresponding period used in quantifying going forward costs and shall be calculated using reported availability data (GADS) for the Existing Generating Capacity Resource.

IMR = annual infra-marginal rents, in dollars. In the case of a resource that has indicated in the submission of a Static De-List Bid or Permanent De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period (and thereafter, in the case of a Permanent De-List Bid), this value shall be calculated by subtracting all submitted cost data representing the cumulative actual cost of production (total expenses related to the production of energy, e.g. fuel, actual consumables such as chemicals and water, and, if quantified, incremental labor and maintenance) from the Existing Generating Capacity Resource's total ISO market revenues. In the case of a resource that has not indicated in the submission of a Static De-List Bid or Permanent De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period, this value shall be \$0.00. As soon as practicable, the resource's total ISO market revenues used in this calculation shall be calculated by the ISO and available to the Lead Market Participant upon request.

PER = resource-specific annual peak energy rents, in dollars. As soon as practicable, this value shall be calculated by the ISO and available to the Lead Market Participant upon request.

At the option of the Lead Market Participant, the cumulative production costs for each of the most recent three Capacity Commitment Periods may be submitted and the annual infra-marginal rents calculated for each year. The Lead Market Participant may then specify two of the three years to be averaged and subsequently used as the IMR value. Upon exercising such option, the PER value used shall be an average of the PER values for the two years selected

InfIndex = inflation index. infIndex =  $(1 + i)^4$ 

Where: "i" is the most recent reported 1-Year Constant Maturity Treasury Rate at the beginning of the qualification period. The specific value to be used shall be specified by the ISO and available to the Lead Market Participant.

# III.13.1.2.3.2.1.3. Opportunity Costs.

To the extent that an Existing Generating Capacity Resource submitting a Static De-List Bid, Export Bid above \$1.00/kW-month, or Permanent De-List Bid above \$1.00/kW-month has opportunity costs that

support a de-list or export bid that exceeds the thresholds described in Section III.13.1.2.3.1, the Lead Market Participant must include in the Existing Capacity Qualification Package evidence supporting such costs. Any risk that can be quantified and analytically supported and that is not already reflected in the formula for net risk-adjusted going forward costs described in Section III.13.1.2.3.2.1.2 may be included as an opportunity cost. Opportunity costs associated with major repairs necessary to restore decreases in capacity as described in Section III.13.1.2.2.4, capital projects required to operate the plant as a capacity resource or other uses of the resource shall be considered, provided such costs are substantiated by evidence of a repair plan, documented business plan and fundamental market analysis, or other independent and transparent trading index or indices as applicable. Substantiation of opportunity costs relying on sales in reconfiguration auctions or risk aversion premiums shall not be considered sufficient justification. The ISO will consider evidence of opportunity costs described in this Section III.13.1.2.3.2.1.3, and if the ISO determines that the opportunity costs justify a de-list bid or export bid above the threshold described in Section III.13.1.2.3.1, the bid will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b).

#### III.13.1.2.3.2.2. [Reserved.]

### III.13.1.2.3.2.3. Administrative Export De-List Bids.

The Internal Market Monitor shall review each Administrative Export De-List Bid associated with a multi-year contract entered into prior to April 30, 2007 in the first Forward Capacity Auction in which it clears. An Administrative Export De-List Bid shall be rejected if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, and the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)).

# III.13.1.2.3.2.4. Static De-List Bids for Reductions in Ratings Due to Ambient Air Conditions.

A Lead Market Participant may submit a Static De-List Bid for up to the megawatt amount that the Lead Market Participant expects will not be physically available due to the difference between the summer Qualified Capacity at 90 degrees and the expected rating of the resource at 100 degrees. The ISO shall verify during the qualification process that the rating is accurate. Such Static De-List Bids may be entered into the Forward Capacity Market at prices up to and including the Forward Capacity Auction Starting Price, subject to validation of the physical limit. Static De-List Bids for reductions in ratings due to

ambient air conditions shall not be subject to the review described in Section III.13.1.2.3.2 and need not include documentation for that purpose.

#### III.13.1.2.3.2.5. Incremental Capital Expenditure Recovery Schedule.

Except as described below, the Internal Market Monitor shall review all de-list bids using the following cost recovery schedule for incremental capital expenditures, which assumes an annual pre-tax weighted average cost of capital of 10 percent.

|                  |                | Annual Rate of |
|------------------|----------------|----------------|
| Age of Existing  | Remaining Life | Capital Cost   |
| Resource (years) | (years)        | Recovery       |
| 1 to 5           | 30             | 0.106          |
| 6 to 10          | 25             | 0.110          |
| 11 to 15         | 20             | 0.117          |
| 16 to 20         | 15             | 0.131          |
| 21 to 25         | 10             | 0.163          |
| 25 plus          | 5              | 0.264          |

A Market Participant may request that a different pre-tax weighted average cost of capital be used to determine the resource's annual rate of capital cost recovery by submitting the request, along with supporting documentation, in the Existing Capacity Qualification Package. The Internal Market Monitor shall review the request and supporting documentation and may, at its sole discretion, replace the annual rate of capital cost recovery from the table above with a resource-specific value based on an adjusted pre-tax weighted average cost of capital. If the Internal Market Monitor uses an adjusted pre-tax weighted average cost of capital for the resource, then the resource's annual rate of capital cost recovery will be determined according to the following formula:

$$\frac{Cost\ Of\ Capital}{(1-(1+CostOfCapital)^{-RemainingLife})}$$

Where:

Cost Of Capital = the adjusted pre-tax weighted average cost of capital.

Remaining Life = the remaining life of the existing resource, based on the age of the resource, as indicated in the table above.

#### III.13.1.2.4. Qualification Determination Notification for Existing Capacity.

No later than 127 days before the Forward Capacity Auction, the ISO shall send notification to the Lead Market Participant that submitted each Static De-List Bid, Permanent De-List Bid, Export Bid, and Administrative Export De-List Bid indicating whether the bid has been accepted for participation in the Forward Capacity Auction. Each accepted Static De-List Bid, Permanent De-List Bid, Export Bid, and Administrative Export De-List Bid shall be binding and shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). Where a Static De-List Bid, Permanent De-List Bid, Export Bid, or Administrative Export De-List Bid is not accepted for participation in the Forward Capacity Auction as a result of the Internal Market Monitor's review pursuant to Section III.13.1.2.3.2, the notification shall include an explanation of the reasons the Existing Capacity Qualification Package was not accepted and shall include the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor. The qualification determination shall not include the results of the reliability review subject to Section III.13.2.5.2.5.

# III.13.1.2.5. Optional Existing Capacity Qualification Package for New Generating Capacity Resources Previously Counted as Capacity.

A resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2 (resources previously counted as capacity resources) may elect to submit an Existing Capacity Qualification Package in addition to the New Capacity Show of Interest Form and New Capacity Qualification Package that it is required to submit pursuant to Section III.13.1.1.2. The bids contained in an Existing Capacity Qualification Package submitted pursuant to this Section III.13.1.2.5 must clearly indicate which New Generating Capacity Resource the Existing Capacity Qualification Package is associated with, and if accepted in accordance with Section III.13.1.2.3, would only be entered into the Forward Capacity Auction where: (i) the new resource is not accepted for participation in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.2; or (ii) no offer from that New Generating Capacity Resource clears in the Forward Capacity Auction, as described in Section III.13.2.3.2(e). An Existing Capacity Qualification Package submitted pursuant to this Section III.13.1.2.5 must conform in all other respects to the requirements of this Section III.13.1.2.

#### III.13.1.3. Import Capacity.

The qualification requirements for import capacity shall depend on whether the import capacity is an Existing Import Capacity Resource or a New Import Capacity Resource. Both Existing Import Capacity Resources and New Import Capacity Resources clearing in the Forward Capacity Auction shall have a Capacity Supply Obligation and shall receive payments only for the one-year Capacity Commitment Period associated with that Forward Capacity Auction. Both Existing Import Capacity Resources and New Import Capacity Resources clearing in the Forward Capacity Auction must be backed by one or more External Resources or by an external Control Area throughout the relevant Capacity Commitment Period. An external Demand Resource may not be an Existing Import Capacity Resource or a

New Import Capacity Resource. External nodes shall be mapped to Capacity Zones as shown in the following table:

| External Node Common Name       | Capacity Zone |
|---------------------------------|---------------|
| NB-NE External Node             | Maine         |
| HQ Phase I/II External Node     | Rest-of-Pool  |
| Highgate External Node          | Rest-of-Pool  |
| NY-NE AC External Node          | Rest-of-Pool  |
| Cross Sound Cable External Node | СТ            |

# III.13.1.3.1. Definition of Existing Import Capacity Resource.

Capacity associated with a multi-year contract entered into before the Existing Capacity Qualification

Deadline to provide capacity in the New England Control Area from outside of the New England Control

Area for a period including the whole Capacity Commitment Period, or capacity from an External

Resource that is owned or directly controlled by the Lead Market Participant and which is committed for

at least two whole consecutive Capacity Commitment Periods by the Lead Market Participant in the New

Capacity Qualification Package, shall participate in the Forward Capacity Auction as an Existing Import

Capacity Resource, except that if that Existing Import Capacity Resource has not cleared in a previous

Forward Capacity Auction, then the import capacity shall participate in the Forward Capacity Auction as

a New Import Capacity Resource.

#### III.13.1.3.2. Qualified Capacity for Existing Import Capacity Resources.

The summer Qualified Capacity and winter Qualified Capacity of an Existing Import Capacity Resource shall be based on the data provided to the ISO during the qualification process, subject to ISO review and verification.

The qualified capacity for the Existing Import Capacity Resources associated with the VJO and NYPA contracts listed in Section III.13.1.3.3(c) as of the Capacity Commitment Period beginning June 1, 2014 shall be equal to the lesser of the stated amount in Section III.13.1.3.3(c) or the median amount of the energy delivered from the Existing Import Capacity Resource during the New England system coincident peak over the previous five Capacity Commitment Periods at the time of qualification.

#### III.13.1.3.3. Qualification Process for Existing Import Capacity Resources.

Existing Import Capacity Resources shall be subject to the same qualification process as Existing Generating Capacity Resources, as described in Section III.13.1.2.3, except as follows:

- (a) No later than 10 Business Days prior to the Existing Capacity Qualification Deadline, the Market Participant submitting each Existing Import Capacity Resource must also submit to the ISO: (i) documentation of a multi-year contract entered into before the Existing Capacity Qualification Deadline to provide capacity in the New England Control Area from outside the New England Control Area for a period including the whole Capacity Commitment Period, including documentation of the MW value of the contract; or (ii) proof of ownership or direct control over one or more External Resources that will be used to back the Existing Import Capacity Resource during the Capacity Commitment Period, together with information to establish the summer and winter ratings of the resource(s) backing the import. In either case, the Market Participant must specify the interface over which the capacity will be imported.
- (b) The rationing election described in Section III.13.1.2.3.1 shall not apply. An Existing Import Capacity Resource may not elect whether to be rationed. As described in Section III.13.2.6, Existing Import Capacity Resources are always subject to rationing, except where such rationing would violate any applicable physical minimum flow requirements on the associated interface.
- (c) The Existing Import Capacity Resources associated with contracts listed in the table below may qualify to receive the treatment described in Section III.13.2.7.3 for the duration of the contracts as listed. For each Forward Capacity Auction after the first Forward Capacity Auction, in order for an Existing Import Capacity Resource associated with a contract listed below to qualify for the treatment described in Section III.13.2.7.3, no later than 10 Business Days prior to the Existing Capacity Qualification Deadline, the Market Participant submitting the Existing Import Capacity Resource must also submit to the ISO documentation verifying that the contract will remain in effect throughout the Capacity Commitment Period and that it has not been amended. For the first Forward Capacity Auction, Existing Import

Capacity Resources associated with contracts listed in the table below are qualified to receive the treatment described in Section III.13.2.7.3.

| <b>Contract Description</b>    | MW        | <b>Contract End Date</b> |
|--------------------------------|-----------|--------------------------|
| NYPA: NY — NE: CMEEC           | 13.2      | 8/31/2025                |
| NYPA: NY — NE: MMWEC           | 53.3      | 8/31/2025                |
| NYPA: NY — NE: Pascoag         | 2.3       | 8/31/2025                |
| NYPA: NY— NE: VELCO            | 15.3      | 8/31/2025                |
|                                | 84.1      |                          |
| VJO: Highgate — NE             | Up to 225 | 10/31/2016               |
| VJO: Highgate — NE (extension) | Up to 6   | October 2020             |
| (beginning 11/01/2016)         |           |                          |
| VJO: Phase I/II — NE           | Up to 110 | 10/31/2016               |

### III.13.1.3.4. Definition of New Import Capacity Resource.

Capacity not associated with a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside the New England Control Area for the whole Capacity Commitment Period, but that meets the requirements of Section III.13.1.3.5.1, shall participate in the Forward Capacity Auction as a New Import Capacity Resource. For capacity associated with a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside the New England Control Area for a period including the whole Capacity Commitment Period, or capacity from an External Resource that is owned or directly controlled by the Lead Market Participant and which is committed for at least two whole consecutive Capacity Commitment Periods by the Lead Market Participant in the New Capacity Qualification Package, if the import capacity has not cleared in a previous Forward Capacity Auction, then the import capacity shall participate in the Forward Capacity Auction as a New Import Capacity Resource.

#### III.13.1.3.5. Qualification Process for New Import Capacity Resources.

The qualification process for a New Import Capacity Resource, whether backed by a new External Resource, by one or more existing External Resources, or by an external Control Area, shall be the same as the qualification process for a New Generating Capacity Resource, as described in Section III.13.1.1.2, except as follows:

### III.13.1.3.5.1. Documentation of Import.

For each New Import Capacity Resource, the Market Participant submitting the import capacity must also submit: (i) documentation of a one-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the entire Capacity Commitment Period, including documentation of the MW value of the contract; (ii) documentation of a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for a period including the entire Capacity Commitment Period if the import capacity has not cleared in a previous Forward Capacity Auction, including documentation of the MW value of the contract; (iii) proof of ownership or direct control over one or more External Resources that will be used to back the New Import Capacity Resource during the Capacity Commitment Period, including information to establish the summer and winter ratings of the resource(s) backing the import; or (iv) documentation for system-backed import capacity that the import capacity will be supported by the Control Area and that the energy associated with that system-backed import capacity will be afforded the same curtailment priority as that Control Area's native load. For each New Import Capacity Resource, the Market Participant must specify the interface over which the capacity will be imported. The Market Participant must indicate whether the import is associated with any investment in transmission that increases New England's import capability. If the import will be backed by a single new External Resource, the Market Participant submitting the import capacity must also submit a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21.1 or some other type).

#### III.13.1.3.5.2. Import Backed by Existing External Resources.

If the New Import Capacity Resource will be backed by one or more External Resources existing at the time of the Forward Capacity Auction, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Market Participant shall instead submit a description of how the Capacity Supply Obligation, if an offer from the New Import Capacity Resource clears in the Forward Capacity Auction, will be met.

The description must indicate specifically which External Resources will back the New Import Capacity Resource during the Capacity Commitment Period, and if those External Resources are not owned or controlled directly by the Market Participant, the description must include a commitment that the External Resources will have sufficient capacity that is not obligated outside the New England Control Area to

fully satisfy the New Import Capacity Resource's potential Capacity Supply Obligation during the Capacity Commitment Period and demonstrate how that commitment will be met.

#### III.13.1.3.5.3. Imports Backed by an External Control Area.

If the New Import Capacity Resource will be backed by an external Control Area, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Market Participant shall instead submit system load and capacity projections for the external Control Area showing sufficient excess capacity during the Capacity Commitment Period to back the New Import Capacity Resource.

### III.13.1.3.5.3.1. Imports Crossing Intervening Control Areas.

The preceding rules define requirements associated with the import of capacity from a Control Area, or resources located in a Control Area, directly adjacent to the New England Control Area. Imports of capacity from a Control Area or resources located in a Control Area where such import crosses an intervening Control Area or Control Areas shall comply with the following additional requirements: (1) For imports crossing a single intervening Control Area, the Market Participant entering the import contract shall demonstrate, as detailed in the ISO New England Manuals, that the remote Control Area will afford the energy export to the adjacent intervening Control Area the same curtailment priority as its native load, that the adjacent intervening Control Area has procedures in place to explicitly recognize the linkage between the import and re-export of energy in support of the import contract, and that the energy export to the ISO will not be curtailed (except pro-rata with a curtailment of native load) so long as the linked import is flowing. (2) For imports crossing more than one intervening Control Area, in addition to the requirements above, the Market Participant entering the import contract shall demonstrate, as detailed in the ISO New England Manuals, by the New Capacity Qualification Deadline, that explicit market and operating procedures exist among the intervening Control Areas to ensure that the energy required to be delivered to the New England Control Area will be guaranteed the same curtailment priority as the intervening native loads, and that none of the intervening Control Areas will curtail the transaction except in conjunction with a curtailment of native load. (3) The Market Participant entering the import contract shall demonstrate that capacity it supplies to the New England Control Area will not be recalled or curtailed to satisfy the load of the external Control Area, or that the external Control Area in which it is located will afford New England Control Area load the same curtailment priority that it affords its own Control Area native load.

#### III.13.1.3.5.4. Capacity Commitment Period Election.

The provisions regarding Capacity Commitment Period election (Section III.13.1.1.2.2.4) shall not apply. A New Import Capacity Resource may not elect to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that clears in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears.

#### III.13.1.3.5.5. Initial Interconnection Analysis.

The provisions regarding initial interconnection analysis (Section III.13.1.1.2.3) shall not apply.

# III.13.1.3.5.6. Review by Internal Market Monitor of Offers from New Import Capacity Resources and Existing Import Capacity Resources.

In addition to the review described in Section III.13.1.1.2.2.3 and Section III.A.21, the Internal Market Monitor shall review each offer from Existing Import Capacity Resources and New Import Capacity Resources. An offer from an Existing Import Capacity Resource or a New Import Capacity Resource shall be rejected if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, and the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)).

# III.13.1.3.5.7. Qualification Determination Notification for New Import Capacity Resources.

For New Import Capacity Resources, the qualification determination notification described in Section III.13.1.1.2.8 shall be modified to reflect the differences in the qualification process described in this Section III.13.1.3.5.

## III.13.1.3.5.8. Rationing Election.

The rationing election described in Section III.13.1.1.2.2.3(b) shall not apply. A New Import Capacity Resource may not elect whether to be rationed. As described in Section III.13.2.6, New Import Capacity Resources are always subject to rationing, except where such rationing would violate any applicable physical minimum flow requirements on the associated interface.

### III.13.1.4. Demand Resources.

#### III.13.1.4.1. Demand Resources.

To participate in a Forward Capacity Auction as a Demand Resource, a resource must meet the requirements of this Section III.13.1.4.1. No resource shall be permitted to participate in a Forward Capacity Auction as a Demand Response Capacity Resource prior to the Forward Capacity Auction for the 2017-2018 Capacity Commitment Period. A Demand Response Capacity Resource with an early Commercial Operation Date shall be considered a Real-Time Demand Response Resource for any Capacity Commitment Period commencing prior to June 1, 2017. No resource shall be permitted to participate in a Forward Capacity Auction as a Real-Time Demand Response Resource beginning with the Forward Capacity Auction for the 2017-2018 Capacity Commitment Period. The amount of capacity offered by a Demand Resource shall be a minimum of 100 kW aggregated in a Dispatch Zone. A Demand Resource may continue to offer capacity into Forward Capacity Auctions and reconfiguration auctions for Capacity Commitment Periods in an amount less than or equal to its remaining Measure Life. Demand Resources must comply with all applicable federal, state, and local regulatory, siting, and tariff requirements, including interconnection tariff requirements related to siting, interconnection, and operation of the Demand Resource. Demand Resources are not permitted to submit import or export bids or Administrative Export De-list Bids.

A Demand Resource shall no longer be eligible to participate in the Forward Capacity Market if its Permanent De-list Bid is accepted. For purposes of this Section III.13.1.4, references to the Lead Market Participant for a resource shall include the Enrolling Participant for a Demand Resource.

#### III.13.1.4.1.1. Existing Demand Resources.

Demand Resources that previously have been in service and registered with the ISO, and which are not otherwise New Demand Resources, shall be Existing Demand Resources. Existing Demand Resources shall include and are limited to (i) Demand Resources that have been in service and registered with the ISO to fulfill a Capacity Supply Obligation created by clearing in a past Forward Capacity Auction, or (ii) Demand Resources participating in the Real-Time Demand Response Program (30-Minute and 2-Hour) and in the Real-Time Profiled Response Program, as defined in Appendix E of this Market Rule 1, before the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction. Except as specified in Section III.13.1.4.1, Existing Demand Resources shall be subject to the same qualification process as Existing Generating Capacity Resources, as described in Section III.13.1.2.3. Existing Demand Resources shall be subject to Section III.13.1.2.2.5.2. An Existing Demand Resource may submit a Non-Price Retirement Request pursuant to the provisions of Section III.13.1.2.3.1.5, provided, however, that Non-Price Retirement Requests shall not be used as a mechanism to inappropriately qualify assets associated with Existing Demand Resources as New Demand Resources. Existing Demand Resources

may de-list consistent with Sections III.13.1.2.3.1.1 and III.13.1.2.3.1.2. Existing Demand Response Capacity Resources shall be subject to Section III.13.7.1.1.5.

#### III.13.1.4.1.2. New Demand Resources.

A New Demand Resource is a Demand Resource that has not been in service prior to the applicable Existing Capacity Qualification Deadline of the Forward Capacity Auction, or Distributed Generation that has operated only to address an electric power outage due to failure of the electrical supply, on-site disaster, local equipment failure, or public service emergencies such as flood, fire, or natural disaster, or excessive deviations from standard voltage from the electrical supplier to the premises during the 12-month period prior to the applicable Existing Capacity Qualification Deadline of the Forward Capacity Auction, and is not an Existing Demand Resource. A Demand Resource that has previously been defined as an Existing Demand Resource shall be considered a New Demand Resource if it meets one of the conditions listed in Section III.13.1.1.1.2.

### III.13.1.4.1.2.1. Qualified Capacity of New Demand Resources.

For Forward Capacity Auctions a New Demand Resource shall have a summer Qualified Capacity and winter Qualified Capacity based on the resource's Demand Reduction Values as submitted and reviewed pursuant to this Section III.13.1.4.

The documentation, analysis, studies and methodologies used to support the estimates described in this Section III.13.1.4.1.2.1 must be submitted as part of the Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

## III.13.1.4.1.2.2. Initial Analysis for Certain New Demand Resources

For each New Demand Resource that is a Demand Response Capacity Resource, Real-Time Demand Response Resource or a Real-Time Emergency Generation Resource, the ISO shall perform an analysis based on the information provided in the New Demand Resource Show of Interest Form to determine the amount of capacity that the resource could provide by the start of the associated Capacity Commitment Period. This analysis shall be performed consistent with the criteria and conditions described in ISO New England Planning Procedures. Where, as a result of this analysis, the ISO determines that because of overlapping interconnection impacts, such a New Demand Resource that is otherwise accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1 cannot deliver any of the capacity that it would otherwise be able to provide (in the

absence of the other relevant Existing Capacity Resources), then that New Demand Resource will not be accepted for participation in the Forward Capacity Auction.

#### III.13.1.4.1.3. Special Provisions for Real-Time Emergency Generation Resources.

All Real-Time Emergency Generation Resources shall be treated in the same manner as Existing Demand Resources in the Forward Capacity Auction as described in Section III.13.2. Real-Time Emergency Generation Resources may: (i) submit Static De-list Bids pursuant to Section III.13.1.2.3.1.1, (ii) submit Dynamic De-list Bids pursuant to Section III.13.2.3.2(d), or (iii) submit Permanent De-list Bids pursuant to Section III.13.1.2.3.1.2. Real-Time Emergency Generation Resources may not submit an Export Bid pursuant to Section III.13.1.2.3.1.3 or an Administrative Export De-list Bid pursuant to Section III.13.1.2.3.1.4. Real-Time Emergency Generation Resources may not import capacity pursuant to Section III.13.1.3. A Real-Time Emergency Generation Resource may not participate in a reconfiguration auction. Such resources may participate in a Capacity Supply Obligation Bilateral as either a Capacity Transferring Resource or a Capacity Acquiring Resource, provided, however, that where a Real-Time Emergency Generation Resource participates in a Capacity Supply Obligation Bilateral as a Capacity Acquiring Resource, the Capacity Transferring Resource must also be a Real-Time Emergency Generation Resource. Such resources may not be Supplemental Capacity Resources. Real-Time Emergency Generation Resources that are New Demand Resources as defined in Section III.13.1.4.1.2 shall be subject to the qualification and financial assurance requirements applicable to New Demand Resources.

#### III.13.1.4.2. Show of Interest Form for New Demand Resources.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Resource, the Project Sponsor must submit to the ISO a New Demand Resource Show of Interest Form as described in this Section III.13.1.4.2 during the New Capacity Show of Interest Submission Window, as described in Section III.13.1.10. The ISO may waive the submission of any information not required for evaluation of a project. The New Demand Resource Show of Interest Form is available on the ISO website.

(a) A completed New Demand Resource Show of Interest Form shall include, but is not limited to, the following information: project name; Load Zone within which the Demand Resource project will be located; the Dispatch Zone within which a Demand Response Capacity Resource, Real-Time Demand Response Resource, or Real-Time Emergency Generation Resource will be located; estimated summer and winter Demand Reduction Values (MW) per measure and/or per customer facility (measured at the

customer meter and not including losses) expected to be achieved five weeks prior to the first and second annual Forward Capacity Auctions after the Forward Capacity Auction in which the Demand Resource Project Sponsor's capacity award would be made, if applicable, and on the Commercial Operation date; estimated total summer and winter Demand Reduction Value of the Demand Resource project; supporting documentation (e.g., engineering estimates or documentation of verified savings from comparable projects) to substantiate the reasonableness of the estimated Demand Reduction Values; Demand Resource type (On-Peak Demand Resource, Seasonal Peak Demand Resource, Demand Response Capacity Resource, Real-Time Demand Response Resource or Real-Time Emergency Generation Resource); brief Demand Resource project description including measure type (i.e., Energy Efficiency, Load Management, and/or Distributed Generation); types of facilities at which the measures will be implemented; customer classes and end-uses served; expected Commercial Operation date -i.e., the date by which the Project Sponsor expects to reach Commercial Operation (Commercial Operation for a Demand Resource shall mean the demonstration to the ISO by the Project Sponsor that the Demand Resource described in the Project Sponsor's New Demand Resource Qualification Package has achieved its full Demand Reduction Value); ISO Market Participant status and ISO customer identification (if applicable); status under Schedules 22 or 23 of the Transmission, Markets and Services Tariff (if applicable); project/technical and credit/financial contacts; and for individual Distributed Generation projects and Demand Resource projects from a single facility with a Demand Reduction Value equal to or greater than 5 MW, the Pnode and service address at which the end-use facility is located; capability and experience of the Project Sponsor.

#### III.13.1.4.2.1. Qualification Package for Existing Demand Resources.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as an Existing Demand Resource, the Project Sponsor must submit an Existing Capacity Qualification Package no later than the Existing Capacity Qualification Deadline. The Existing Capacity Qualification Package for an Existing Demand Resource shall conform to the requirements of Section III.13.1.4.1. All Existing Demand Resources must provide a Measurement and Verification Plan which complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

### III.13.1.4.2.2. Qualification Package for New Demand Resources.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Resource, the Project Sponsor must submit a New Demand Resource Qualification Package no later than the New Capacity Qualification Deadline. The New Demand Resource Qualification Package

shall conform to the requirements of this Section III.13.1.4.2.2. The ISO may waive the submission of any information not required for evaluation of a project.

#### III.13.1.4.2.2.1. [Reserved.]

#### III.13.1.4.2.2.2. Source of Funding.

The Project Sponsor must provide source of funding which includes, but is not limited to, the following information: The source(s) of public benefits funding or private financing, or a funding plan supplemented by information on how previous projects were funded; A completed ISO credit application.

#### III.13.1.4.2.2.3. Measurement and Verification Plan.

For all Demand Resources other than Demand Response Capacity Resources and Real-Time Emergency Generation Resources, the Project Sponsor must provide a Measurement and Verification Plan which complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3, Section III.8A and III.8B and the ISO New England Manuals.

#### III.13.1.4.2.2.4. Customer Acquisition Plan.

A Project Sponsor with more than a single customer must provide a description of its plan to acquire customers that includes, but is not limited to, the following information: a description of proposed customer market; the estimated size of target market and supporting documentation; a marketing plan with supporting documentation describing the manner in which customers will be recruited; and evidence supporting the viability of the marketing plan.

# III.13.1.4.2.2.4.1. Individual Distributed Generation Projects and Demand Resource Projects From a Single Facility With A Demand Reduction Value Greater Than or Equal to 5 MW.

For individual Distributed Generation projects and Demand Resource projects from a single facility with a Demand Reduction Value greater than or equal to 5 MW the critical path schedule requirements and the monitoring and milestones are the same as those required for New Generating Capacity Resources as set forth in Section III.13.1.1.2.2.2.

III.13.1.4.2.2.4.2. Demand Resource Projects Involving Multiple Facilities and Demand
Resource Projects From a Single Facility With A Demand Reduction Value
Less Than 5 MW.

A critical path schedule for Demand Resource projects installed at multiple facilities and Demand Resource projects from a single facility with a Demand Reduction Value of less than 5 MW shall be comprised of a delivery schedule of the share of total offered Demand Reduction Value achieved as of target dates which are: (i) The cumulative percentage of total Demand Reduction Value achieved on target date 1 occurring five weeks prior to the first annual Forward Capacity Auction after the Forward Capacity Auction in which the Demand Resource Project Sponsor's capacity award was made; (ii) The cumulative percentage of total Demand Reduction Value achieved on target date 2 occurring five weeks prior to the second annual Forward Capacity Auction after the Forward Capacity Auction in which the Demand Resource Project Sponsor's capacity award was made; and (iii) target date 3 which is the expected Commercial Operation date, which must be on or before the first day of the relevant Capacity Commitment Period and by which date 100% of total Demand Reduction Value must be complete

# III.13.1.4.2.2.4.3. Additional Requirement For Demand Resource Project Sponsor Proposing Total Demand Reduction Value of 30 Percent or Less by the Second Target Date.

If a Demand Resource Project Sponsor proposes in its New Demand Resource Qualification Package a cumulative Percent of Total Demand Reduction Value Complete that is 30 percent or less by the second critical path schedule target date, then a pipeline analysis must be submitted to the ISO five weeks prior to the second annual Forward Capacity Auction after the Forward Capacity Auction in which the award was made. A pipeline analysis demonstrates the Demand Resource Project Sponsor's ability to fulfill its obligation to deliver capacity that cleared in a Forward Capacity Auction by the relevant Capacity Commitment Period. Such an analysis must list the customers that have made a commitment to participate in the Demand Resource Project Sponsor's program to deliver capacity to meet the Demand Resource Project Sponsor's Forward Capacity Auction obligations, and must include each customer's projected summer and winter Demand Reduction Values, and expected measure installation date; provided, however, that a Demand Resource Project Sponsor targeting customer facilities with under 10 kW of Demand Reduction Value per facility shall have the option of using a targeting and marketing plan based on past performance in that market to determine the Project Sponsor's ability to fulfill its obligation by the relevant Capacity Commitment Period. To the extent that the Demand Resource Project Sponsor is unable to demonstrate through its pipeline analysis that it has sufficient customers to meet its Capacity Supply Obligation by the beginning of the relevant Capacity Commitment Period, the Demand Resource Project Sponsor shall be subject to the ISO's critical path schedule monitoring procedures, as specified in Section III.13.3 of Market Rule 1.

### III.13.1.4.2.2.5. Capacity Commitment Period Election.

In the New Demand Resource Qualification Package, the Project Sponsor must specify whether, if its New Demand Resource offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. If no such election is made in the New Demand Resource Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Demand Resource offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Demand Resource offer clears. If the Project Sponsor elects to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, then the Project Sponsor may not change the Demand Resource type as long as that Capacity Supply Obligation and Capacity Clearing Price continue to apply. If an offer from a New Demand Resource clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.4.2.2.5.

#### III.13.1.4.2.2.6. Rationing Election.

The Project Sponsor for a New Demand Resource must indicate in the New Demand Resource Qualification Package if an offer from the New Demand Resource may be rationed. A Project Sponsor may specify a single MW quantity to which offers may be rationed. Without such indication, offers will only be accepted or rejected in whole. This rationing election shall apply for the entire Forward Capacity Auction.

# III.13.1.4.2.3. Consistency of the New Demand Resource Qualification Package and New Demand Resource Show of Interest Form.

The ISO shall review the Project Sponsor's New Demand Resource Qualification Package for consistency with its New Demand Resource Show of Interest Form. The New Demand Resource Qualification Package may not contain material changes relative to the New Demand Resource Show of Interest Form. A material change may include, but is not limited to the following: (i) a change in the designation of the Demand Resource type; (ii) a change in the Project Sponsor, subject to review by the ISO of the capability and experience of the new Project Sponsor; (iii) a change in the Load Zone within which the

project is located, and a change in the Dispatch Zone within which the Demand Response Capacity Resource, Real-Time Demand Response Resource or Real-Time Emergency Generation Resource is located; (iv) a change in the total summer or winter Demand Reduction Value of the project by more than 30 percent; (v) a change in the general type of measure being implemented (e.g., Energy Efficiency, Load Management, Distributed Generation); (vi) a change in the treatment as an Existing Demand Resource for the first Forward Capacity Auction; or (viii) a misrepresentation of the interconnection status of a Distributed Generation project.

#### III.13.1.4.2.4. Offers From New Demand Resources.

All New Demand Resources that might submit offers in the Forward Capacity Auction at prices below the relevant Offer Review Trigger Price must include in the New Demand Resource Qualification Package the lowest price at which the resource requests to offer capacity in the Forward Capacity Auction and supporting documentation justifying that price as competitive in light of the resource's costs (as described in Section III.A.21). This price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that section.

#### III.13.1.4.2.5. Notification of Qualification for Demand Resources.

#### III.13.1.4.2.5.1. Evaluation of Demand Resource Qualification Materials.

The ISO shall review the information submitted by Existing Demand Resources and New Demand Resources and shall determine whether the information submitted complies with the requirements set forth in this Section III.13.1.4 and whether, based on the information provided, the Demand Resource is accepted for participation in the Forward Capacity Auction. In making these determinations, the ISO may consider, but is not limited to consideration of, the following:

- (a) whether the information submitted by Existing Demand Resources and New Demand Resources is accurate and contains all of the elements required by this Section III.13.1.4;
- (b) whether the critical path schedule submitted by New Demand Resources includes all necessary elements and is sufficiently developed;
- (c) whether the milestones in the critical path schedule submitted by New Demand Resources are reasonable and likely to be met;

- (d) whether, in the case of a resource previously counted as a capacity resource, the requirements for treatment as a New Demand Resource are satisfied; and
- (e) whether the Measurement and Verification Plan complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

#### **III.13.1.4.2.5.2.** Notification of Qualification for Existing Demand Resources.

For each Existing Demand Resource, the ISO will notify the Resource's Lead Market Participant no later than 15 Business Days before the Existing Capacity Qualification Deadline of: (i) Demand Resource type; and (ii) summer and winter Demand Reduction Values and estimates of summer and winter Qualified Capacity as defined in Section III.13.1.4.3 and the Load Zone in which the Capacity Resource is located, and the Dispatch Zone within which a Demand Response Capacity Resource, Real-Time Demand Response Resource, or Real-Time Emergency Generation Resource is located. If the Lead Market Participant believes that an ISO-determined summer Qualified Capacity or winter Qualified Capacity for an Existing Demand Resource does not accurately reflect the determination described in Section III.13.1.4.3, then the Lead Market Participant must notify the ISO within 5 Business Days of receipt of the Qualified Capacity notification. If an Existing Demand Resource is not submitting a change in its Demand Resource type, a Permanent De-List Bid or Static De-List Bid for the Forward Capacity Auction, then no further submissions or actions for that resource are necessary, and the resource shall participate in the Forward Capacity Auction as described in Section III.13.2.3.2(c) with Qualified Capacity as indicated in the ISO's notification, and may not elect to have the Capacity Supply Obligation and Capacity Clearing Price apply after the Capacity Commitment Period associated with the Forward Capacity Auction. If a Market Participant believes that the Demand Reduction Value or Qualified Capacity for an Existing Demand Resource is inaccurate or wishes to change its Demand Resource type, the Market Participant must notify the ISO within 5 Business Days of receipt of the Qualified Capacity notification and submit an Updated Measurement and Verification Plan to reflect the change in its Demand Resource type, if applicable. Updated Measurement and Verification Plans must be received by the ISO no later than 5 Business Days after receipt of the Qualified Capacity notification. Designation of the Demand Resource type may not be changed during the Capacity Commitment Period.

### III.13.1.4.2.5.3. Notification of Qualification for New Demand Resources.

No later than 127 days prior to the relevant Forward Capacity Auction, the ISO shall send notification to Project Sponsors for each New Demand Resource indicating whether the New Demand Resource has been accepted for participation in the Forward Capacity Auction.

### III.13.1.4.2.5.3.1. Notification of Acceptance to Qualify of a New Demand Resource.

For a New Demand Resource accepted for participation in the Forward Capacity Auction, the notification will specify the Demand Resource's summer and winter Demand Reduction Value and summer and winter Qualified Capacity. Designation of the Demand Resource type may not be changed during the Capacity Commitment Period.

### III.13.1.4.2.5.3.2. Notification of Failure to Qualify of a New Demand Resource.

For a New Demand Resource not accepted for participation in the Forward Capacity Auction, the notification will provide an explanation as to why the resource did not meet the requirements set forth in this Section III.13.1.4 and was not accepted.

### III.13.1.4.3. Measurement and Verification Applicable to All Demand Resources.

To demonstrate the Demand Reduction Value of a Demand Resource project, as defined in Section III.13.1.4.1, all Demand Resources participating in the Forward Capacity Auction, Capacity Supply Obligation Bilaterals or reconfiguration auctions shall submit to the ISO the Demand Resource project Measurement and Verification Documents in accordance with this Section III.13.1.4.3, Sections III.8A and III.8B and the ISO New England Manuals. Demand Response Capacity Resources and Real-Time Emergency Generation Resources participating in the Forward Capacity Auction, Capacity Supply Obligation Bilaterals or reconfiguration auctions must estimate Demand Reduction Values pursuant to the requirements of Sections III.8A, Section III.8B, Section III.13.6.1.5.4, and Section III.E1 and Section III.E2. To the extent that a Demand Response Capacity Resource consists, in whole or in part, of assets capable of delivering Net Supply, the estimated Demand Reduction Value of a Demand Response Capacity Resource may include an estimate of Net Supply. A Net Supply Generator Asset or other Generator Asset located at the same Retail Delivery Point as a Demand Response Asset that is associated with a Demand Response Capacity Resource may not participate in the Forward Capacity Market as a Generating Capacity Resource, provided that this exclusion shall not apply to a Generator Asset if it is separately metered and its output is added to the metered load as measured at the Retail Delivery Point. The ISO shall review such Measurement and Verification Documents to determine whether they are consistent with the measurement and verification requirements set forth in this Section III.13.1.4.3,

Section III.8A, Section III.8B, and the ISO New England Manuals.

# III.13.1.4.3.1. Measurement and Verification Documents Applicable to On-Peak Demand Resources, <u>and Seasonal Peak Demand Resources</u>, and Real-Time Demand Response Resources.

Measurement and Verification Documents for On-Peak Demand Resources, and Seasonal Peak Demand Resources, Critical Peak Demand Resources, and Real Time Demand Response Resources must demonstrate both availability and performance of Demand Resource projects in reducing demand coincident with Demand Resource On-Peak Hours, or Demand Resource Seasonal Peak Hours, or Real-Time Demand Response Event Hours, such that the reported monthly Demand Reduction Value shall achieve at least a ten percent relative precision and an eighty percent confidence interval as described and applied in the ISO New England Manual on Measurement and Verification of Demand Reduction Value from Demand Resources. The Measurement and Verification Documents shall serve as the basis for the claimed Demand Reduction Value of a Demand Resource project. The Measurement and Verification Documents shall document the measurement and verification performed to verify the achieved Demand Reduction Value of the Demand Resource project. The Measurement and Verification Documents shall contain a projection of the Demand Resource project's Demand Reduction Value for each month of the Capacity Commitment Period and over the expected Measure Life of the Demand Resource project. A Demand Resource's Measurement and Verification Documents must describe the methodology used to calculate electrical energy load reduction or output during Demand Resource On-Peak Hours, or Demand Resource Seasonal Peak Hoursor Real Time Demand Response Event Hours. The Measurement and Verification Documents shall include a Measurement and Verification Plan submitted in the Forward Capacity Auction Qualification, as described in Section III.13.1.4.3 and a monthly Measurement and Verification Summary Report during the Capacity Commitment Period. The monthly Measurement and Verification Summary Reports shall reference the measurement and verification protocols and performance data documented in the Measurement and Verification Plan or the Measurement and Verification Reference Report(s). Such monthly Measurement and Verification Summary Reports will document the Demand Resource Project Sponsor's total Demand Reduction Value from eligible preexisting measures and new measures, and the Project Sponsor's total Demand Reduction Value from both eligible pre-existing measures and new measures, for all measures it had in operation as of the end of the previous month. The monthly Measurement and Verification Summary Reports shall be based on Measurement and Verification Documents determined in accordance with Market Rule 1 and the ISO New England Manuals, and shall be the basis for monthly settlement with Demand Resource Project Sponsors. All Measurement and Verification Documents shall conform to the ISO's specifications with

respect to content, format and delivery methodology, and shall be submitted in accordance with the timelines and deadlines set forth in Market Rule 1 and the ISO New England Manuals.

### **III.13.1.4.3.1.1.** Optional Measurement and Verification Reference Reports.

At the option of the Demand Resource Project Sponsor, the Measurement and Verification Documents may also include one or more Measurement and Verification Reference Report(s) submitted 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 shall update the prospective Demand Reduction Value of the Demand Resource project based on measurement and verification studies performed during the Capacity Commitment Period.

#### III.13.1.4.3.1.2. Updated Measurement and Verification Documents.

At the option of the Demand Resource Project Sponsor, an Updated Measurement and Verification Plan may be submitted during a subsequent Forward Capacity Auction qualification process prior to the beginning of the Capacity Commitment Period of the Demand Resource project. The Updated Measurement and Verification Plan may include updated Demand Resource project specifications, measurement and verification protocols, and performance data. However, the Updated Measurement and Verification Plan shall not modify for the duration of the Capacity Commitment Period the total Demand Reduction Value and the Demand Resource type from the applicable Forward Capacity Auction in which the Demand Resource Project Sponsor's offer cleared. Additionally, the Updated Measurement and Verification Plan shall provide measurement and verification consistent with the requirements specified in the ISO New England Manuals, and shall be comparable to the quality of the original Measurement and Verification Plan accepted during the Forward Capacity Auction qualification process in which the Demand Resource project cleared the Forward Capacity Auction.

# III.13.1.4.3.1.3. Annual Certification of Accuracy of Measurement and Verification Documents.

Demand Resource Project Sponsors for On-Peak Demand Resources, <u>or</u> Seasonal Peak Demand Resources and Real-Time Demand Response Resources shall submit no less frequently than once per year, a statement certifying that the Demand Resource projects for which the Project Sponsor is requesting compensation continue to perform in accordance with the submitted Measurement and Verification Documents reviewed by the ISO. One such statement must be received by the ISO no later than 10 Business Days before the Existing Capacity Qualification Deadline.

### III.13.1.4.3.1.4. Record Requirement of Retail Customers Served.

For Demand Resource projects targeting customer facilities with greater than or equal to 10 kW of Demand Reduction Value per facility, Demand Resource Project Sponsors shall maintain records of retail customers served including, at a minimum, the retail customer's address, the customer's utility distribution company, utility distribution company account identifier, measures installed, and corresponding monthly Demand Reduction Values. For Demand Resource projects targeting customer facilities with under 10 kW of Demand Reduction Value per facility, the Demand Resource Project Sponsor shall maintain records as described above for customer facilities with greater than or equal to 10 kW of Demand Reduction Value per facility, or shall maintain records of aggregated Demand Reduction Value and measures installed by Load Zone and meter domain. Demand Resource Project Sponsors shall maintain such records until the end of the Measure Life, or until the Demand Resource is permanently delisted from the Forward Capacity Market, and shall submit such records to the ISO upon request in a readable electronic format.

# III.13.1.4.3.2. Measurement and Verification Documentation of Demand Reduction Values Applicable to All Demand Resources.

The Demand Resource Project Sponsor shall designate the specific methodology used to establish Demand Reduction Values, including the specification of Demand Resource On-Peak Hours for On-Peak Demand Resources, Demand Resource Seasonal Peak Hours for Seasonal Peak Demand Resources, Demand Resource Critical Peak Hours for or Real-Time Demand Response Event Hours for Real-Time Demand Response Resources, in its Measurement and Verification Plan pursuant to Section III.13.1.4.3. For Demand Response Capacity Resources and Real-Time Emergency Generation Resources, the Demand Resource Project Sponsor shall provide an estimate of Demand Reduction Values consistent with the baseline calculation methodology in Section III.8A and Section III.8B. To the extent that a Demand Response Capacity Resource consists, in whole or in part, of assets capable of delivering Net Supply, the estimated Demand Reduction Value of a Demand Response Capacity Resource may include an estimate of Net Supply. Distributed Generation, Demand Response Capacity Resource, Real-Time Demand Response, and Real-Time Emergency Generation Resource projects must include individual metering or a metering protocol consistent with the measurement and verification requirements set forth in Market Rule 1 and the ISO New England Manuals to monitor and verify the Demand Reduction Values of the Demand Resource project.

For Capacity Commitment Periods commencing on or after June 1, 2017, all Demand Response Assets must be metered at the Retail Delivery Point.

For Capacity Commitment Periods commencing on or after June 1, 2017, if the Real-Time Emergency
Generation Asset cannot operate synchronized to the grid, and there is no Demand Response Asset at the
same facility, the Real-Time Emergency Generation Asset can be metered at the Retail Delivery Point or
at the Real-Time Emergency Generation Asset. If the Real-Time Emergency Generation Asset is capable
of operating synchronized to the grid or there is a Demand Response Asset at the same facility then both
the Retail Delivery Point and the Real-Time Emergency Generation Asset must be metered. For Capacity
Commitment Periods commencing on or after June 1, 2017, Market Participants with Real-Time
Emergency Generation Assets must utilize a remote terminal unit for communicating telemetry and
receiving Dispatch Instructions, and the metering equipment used to measure the performance of a RealTime Emergency Generation Asset must meet the requirements of Section E2.2.1(a), (b), and (c), must be
tested pursuant to Section E2.2.3, and are subject to auditing pursuant to Section E2.2.4.

For Capacity Commitment Periods commencing on or after June 1, 2017, if a Real-Time Emergency
Generation Asset is metered at the generator, the associated Real-Time Emergency Generation
Resource's Demand Reduction Value shall be calculated based upon the Average Hourly Output. If a
Real-Time Emergency Generation Asset is only metered at the Retail Delivery Point, the associated RealTime Emergency Generation Resource's Demand Reduction Value shall be calculated based upon the
Average Hourly Load Reduction.

#### III.13.1.4.3.2.1. No Performance Data to Determine Demand Reduction Values.

Should a new Demand Resource, other than a Demand Response Capacity Resource, enter service at a time such that there is no performance data for June, July, August, December or January upon which to establish summer or winter seasonal Demand Reduction Values, and the Demand Resource has relieved itself of its Capacity Supply Obligation for those months through a Capacity Supply Obligation Bilateral or reconfiguration auction, then the summer or winter seasonal Demand Reduction Values will be the simple average of its Demand Reduction Values for those months with a Capacity Supply Obligation. For a new Demand Resource, other than a Demand Response Capacity Resource, that enters service outside of the summer DR Auditing Period or winter DR Auditing Period and the Demand Resource has relieved itself of its Capacity Supply Obligation for those months through a Capacity Supply Obligation Bilateral or reconfiguration auction, the Demand Resource Commercial Operation Audit results shall be used in the determination of the summer or winter seasonal Demand Reduction Value.

#### III.13.1.4.3.3. ISO Review of Measurement and Verification Documents.

The ISO shall review the Measurement and Verification Documents and complete such review and identify any necessary modifications in accordance with the Forward Capacity Auction qualification process as described in Section III.13.1 and pursuant to the ISO New England Manuals. In its review of the Measurement and Verification Documents, the ISO may consult with the Project Sponsor to seek clarification, to gather additional necessary information, or to address questions or concerns arising from the materials submitted. At the discretion of the ISO, the ISO may consider revisions or additions to the Measurement and Verification Documents resulting from such consultation; provided, however, that in no case shall the ISO consider revisions or additions to the Measurement and Verification Documents if the ISO believes that such consideration cannot be properly accomplished within the time periods established for the qualification process.

#### III.13.1.4.3.4. Measurement and Verification Costs.

Costs associated with measurement and verification of the Demand Resource project shall be borne by the Demand Resource Project Sponsor. Demand Resource Project Sponsors submitting application materials and Measurement and Verification Documents for review during the Forward Capacity Auction qualification process shall be subject to the Qualification Process Cost Reimbursement Deposit, as described in Section III.13.1.9.3.

### III.13.1.4.4. Dispatch of Active Demand Resources During Event Hours.

### III.13.1.4.4.1. Notification of Demand Resource Forecast Peak Hours.

The ISO shall issue notice to Market Participants concerning Demand Resource Forecast Peak Hours on the day before the relevant Operating Day. The notice issued pursuant to this section is for informational purposes only and shall not constitute a Dispatch Instruction.

# III.13.1.4.4.2. Dispatch of Demand Resources During Real-Time Demand Resource Dispatch Hours.

The ISO shall issue Dispatch Instructions to Market Participants with Real-Time Demand Response Resources to curtail and restore loads during Real-Time Demand Resource Dispatch Hours. Dispatch Instructions shall apply to Real-Time Demand Response Resources. The amount of Demand Resources dispatched for each Real-Time Demand Resource Dispatch Hour will be the amount that the ISO

determines is necessary to meet the reserve deficiency. The ISO may issue Dispatch Instructions that reduce or increase the amount dispatched in each hour.

# III.13.1.4.4.3. Dispatch of Demand Resources During Real-Time Emergency Generation Event Hours.

The ISO shall issue Dispatch Instructions to Market Participants with Real-Time Emergency Generation Resources to curtail and restore loads during Real-Time Emergency Generation Event Hours. Dispatch Instructions shall apply to specific Real-Time Emergency Generation Resources. The amount of Real-Time Emergency Generation Resources dispatched for each Real-Time Emergency Generation Event Hour will be the amount the ISO determines is necessary to meet the reserve deficiency.

### III.13.1.4.5. Selection of Active Demand Resources For Dispatch.

# III.13.1.4.5.1. Management of Real-Time Demand Response Assets and Real-Time Demand Response Resources.

A Market Participant must manage its Real-Time Demand Response Assets that are registered as a component of a Real-Time Demand Response Resource as of the first of a month so that the Real-Time Demand Response Resource complies with Dispatch Instructions. If the operation or potential operation of Real-Time Demand Response Assets cause, or potentially cause, a reliability problem, the ISO may direct Market Participants to not dispatch such assets or to restore the loads of such assets that have already been dispatched. If the ISO directs a Market Participant to not dispatch a Real-Time Demand Response Asset or to restore the load of a dispatched Real-Time Demand Response Asset, an adjustment to the dispatch and/or settlement process will be made to reflect the exclusion of that asset from dispatch or the restoration of that asset. Market Participants with Real-Time Demand Response Assets shall report to the ISO the load reduction and consumption, or generator output of each asset. Market Participants with Real-Time Demand Response Resources consisting of an aggregation of more than one Real-Time Demand Response Asset shall report the load reduction and consumption, or generator output of the resource, to the ISO as the sum of the load reduction, consumption, or generator output of the individual assets making up that resource. Real-Time Demand Response Resources shall be assigned a unique resource identification number. The load reduction and consumption, or generator output of a Real-Time Demand Response Resource is reported to the ISO as a single set of values. A Real-Time Demand Response Resource shall consist of one or more Real-Time Demand Response Assets that are located within the same Dispatch Zone.

# III.13.1.4.5.2. Management of Real-Time Emergency Generation Assets and Real-Time Emergency Generation Resources.

A Market Participant must manage its Real-Time Emergency Generation Assets that are registered as a component of a Real-Time Emergency Generation Resource as of the first of a month so that the Real-Time Emergency Generation Resource complies with Dispatch Instructions. If the operation or potential operation of Real-Time Emergency Generation Assets causes, or potentially causes, a reliability problem, the ISO may direct Market Participants to not dispatch such assets or to discontinue the output of such assets that have already been dispatched. If the ISO directs a Market Participant to not dispatch a Real-Time Emergency Generation Asset or to discontinue the output of a dispatched Real-Time Emergency Generation Asset, an adjustment to the dispatch and/or settlement process will be made to reflect the exclusion of that asset from dispatch or the discontinued output of that asset. Market Participants with Real-Time Emergency Generation Assets shall report to the ISO the load reduction and consumption, or generator output of each asset. Market Participants with Real-Time Emergency Generation Resources consisting of an aggregation of more than one Real-Time Emergency Generation Asset shall report the generator output of the resource to the ISO as the sum of the generator outputs of the individual assets making up that resource. Real-Time Emergency Generation Resources shall be assigned a unique resource identification number. The generator output of a Real-Time Emergency Generation Resource is reported to the ISO as a single set of values. A Real-Time Emergency Generation Resource shall consist of one or more Real-Time Emergency Generation Assets that are located within the same Dispatch Zone.

### III.13.1.4.5.3. [Reserved.]

# III.13.1.4.6. Conversion of Active Demand Resources Defined at the Load Zone to Active Demand Resources Defined at Dispatch Zones.

### III.13.1.4.6.1. Establishment of Dispatch Zones.

The ISO shall establish Dispatch Zones that reflect potential transmission constraints within a Load Zone that are expected to exist during each Capacity Commitment Period. Dispatch Zones shall be used to establish the geographic location and dispatch of Demand Response Capacity Resources, Real-Time Demand Response Resources and Real-Time Emergency Generation Resources. Dispatch Zones shall not change during a Capacity Commitment Period. For each Capacity Commitment Period, the ISO shall establish and publish Dispatch Zones by the beginning of the New Capacity Show of Interest Submission Window of the applicable Forward Capacity Auction. The ISO will review proposed Dispatch Zones with Market Participants prior to establishing and publishing final Dispatch Zones.

# III.13.1.4.6.2. Disaggregation of Real-Time Demand Response Resources and Real-Time Emergency Generation Resources From Load Zones to Dispatch Zones.

### III.13.1.4.6.2.1. Real-Time Demand Response Resource Disaggregation.

Market Participants with a Capacity Supply Obligation that is being fulfilled using a Real-Time Demand Response Resource in a Load Zone shall, prior to the start of the relevant Capacity Commitment Period, disaggregate that Real-Time Demand Response Resource into one or more Real-Time Demand Response Resources located within one or more Dispatch Zones within the original Load Zone. The sum of the Capacity Values of the disaggregated Real-Time Demand Response Resources located within one or more Dispatch Zones within the Load Zone must be equal to the initial Capacity Supply Obligation within the original Load Zone. If the sum of the Capacity Values of the disaggregated Real-Time Demand Response Resources located within one or more Dispatch Zones within a Load Zone is less than the initial Capacity Supply Obligation by the start of the relevant Capacity Commitment Period, and the Market Participant does not transfer the entire difference through a Capacity Supply Obligation Bilateral or an annual reconfiguration auction by the beginning of the relevant Capacity Commitment Period, then the Market Participant will be deemed to have failed to meet its Capacity Supply Obligation, in which case the ISO shall terminate the Market Participant's Capacity Supply Obligation associated with the resource in the amount of the difference (which shall then be entered into subsequent reconfiguration auctions), terminate the Market Participant's right to any payments associated with the terminated Capacity Supply Obligation, and retain any applicable financial assurance associated with the terminated Capacity Supply Obligation.

### III.13.1.4.6.2.2. Real-Time Emergency Generation Resource Disaggregation.

Market Participants with a Capacity Supply Obligation that is being fulfilled using a Real-Time Emergency Generation Resource in a Load Zone shall, prior to the start of the relevant Capacity Commitment Period, disaggregate that Real-Time Emergency Generation Resource into one or more Real-Time Emergency Generation Resources located within one or more Dispatch Zones within the original Load Zone. The sum of the Capacity Values of the disaggregated Real-Time Emergency Generation Resources located within one or more Dispatch Zones within the Load Zone must be equal to the initial Capacity Supply Obligation within the original Load Zone. If the sum of the Capacity Values of the disaggregated Real-Time Emergency Generation Resources located within one or more Dispatch Zones within a Load Zone is less than the initial Capacity Supply Obligation by the start of the relevant Capacity Commitment Period, and the Market Participant does not transfer the entire difference through a

Capacity Supply Obligation Bilateral or an annual reconfiguration auction by the beginning of the relevant Capacity Commitment Period, then the Market Participant will be deemed to have failed to meet its Capacity Supply Obligation in which case the ISO shall terminate the Market Participant's Capacity Supply Obligation associated with the resource in the amount of the difference (which shall then be entered into subsequent reconfiguration auctions), terminate the Market Participant's right to any payments associated with the terminated Capacity Supply Obligation, and retain any applicable financial assurance associated with the terminated Capacity Supply Obligation.

III.13.1.4.7. [Reserved.]

III.13.1.4.8. [Reserved.]

III.13.1.4.9. Restrictions on Real-Time Demand Response Asset, Real-Time Emergency
Generation Asset, On-Peak Demand Resource and Seasonal Peak Demand
Resource Registration.

A Market Participant may not register and, if previously registered, must retire in accordance with Section III.13.1.4.9.1, a Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or asset associated with an On-Peak Demand Resource or Seasonal Peak Demand Resource that is comprised of:

- (a) the customers of Host Utilities that distributed more than 4 million MWh in the previous fiscal year if the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into the ISO-administered markets or programs, or
- (b) the customers of Host Utilities that distributed 4 million MWh or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers' demand response to be bid into the ISO-administered markets or programs.
- III.13.1.4.9.1. Requirement for Real-Time Demand Response Asset, Real-Time Emergency Generation Asset, On-Peak Demand Resource and Seasonal Peak Demand Resource Retirement.

A Market Participant must retire a previously registered Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or asset associated with an On-Peak Demand Resource or Seasonal Peak Demand Resource that is comprised of customers specified in subsections (a) or (b) of Section III.13.1.4.9 no later than 12 months from the date that the ISO receives notice that the relevant electric retail

regulatory authority prohibits such customer's demand response to be bid into the ISO-administered markets or programs or May 31, 2013, whichever is later.

# III.13.1.4.10. Providing Information On Demand Response Capacity, Real-Time Demand Response and Real-Time Emergency Generation Resources.

If requested by a Market Participant with a registered Load Asset, the ISO will provide the following information about end\_use customers served by the Market Participant: (a) whether the end\_use customer's facility is registered with the ISO as part of an asset and whether the asset is associated with a Demand Response Capacity-Resource, Real-Time Demand Response Resource or Real-Time Emergency Generation Resource, and; (b) the load reduction capability of the asset, as specified in the ISO's asset registration system, to which the end-use customer's facility is registered.

#### III.13.1.4.11. Assignment of Demand Assets to a Demand Resource.

The following mapping provisions apply to Demand Resources other than Demand Response Capacity Resources, the mapping for which is addressed in Appendix E to Market Rule 1.

- (a) When a demand asset can be mapped to more than one Demand Resource, any demand assets shall be mapped to a commercial Demand Resource whose demand reduction capability is less than the lower of (i) its commercial capacity, as reflected in the resource's highest audit value or (ii) its highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period, before being mapped to a non-commercial Demand Resource or non-commercial increment of a Demand Resource.
- (b) A demand asset cannot be unmapped from a Demand Resource if, following the unmapping, the sum of the audit values of the remaining demand assets that are mapped to the Demand Resource would be lower than the resource's highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period.

# III.13.1.5. Offers Composed of Separate Resources.

Separate resources seeking to participate together in a Forward Capacity Auction shall submit a composite offer form no later than 10 Business Days after the date on which the ISO provides qualification determination notifications, as described in Section III.13.1.2.8, Section III.13.1.2.4, and Section III.13.1.2.4.5.3. Offers composed of separate resources may not be modified or withdrawn after

the deadline for submission of the composite offer form. Separate resources may together participate in a Forward Capacity Auction as a single resource if the following conditions are met:

- (a) In all months of the summer period (June through September where the summer resource is not a Demand Resource, April through November where the summer resource is a Demand Resource) of the Capacity Commitment Period, only one resource may be used to supply the amount of capacity offered during the entire summer period. In all months of the winter period (October through May where the summer resource is not a Demand Resource, December through March where the summer resource is a Demand Resource) of the Capacity Commitment Period, multiple resources may be combined to supply the amount of capacity offered, provided that: (i) the resources together meet the amount of the offer in all months of the winter period; and (ii) to combine for a month, that month must be considered a winter month for both the summer resource and the resource combining with that summer resource in that month.
- (b) Each resource that is part of an offer composed of separate resources must qualify in accordance with all of the provisions of this Section III.13.1.5 applicable to that resource type. An offer composed of separate resources participates in the Forward Capacity Auction in accordance with the resource type of the resource providing capacity in the summer period. A resource electing (pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.2.2.5) to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its New Capacity Offer clears shall not be eligible to participate in an offer composed of separate resources as the resource providing capacity in the summer period in the Forward Capacity Auction in which the resource is a New Generating Capacity Resource or New Demand Resource.
- (c) The summer Qualified Capacity of an offer composed of separate resources shall be the summer Qualified Capacity of the single resource that will provide the Capacity Supply Obligation during the summer period. If the summer Qualified Capacity of an offer composed of separate resources is greater than the winter capacity for any month, then the provisions of Section III.13.1.2.2.5.2 shall apply, even where any of the resources comprising the offer composed of separate resources is an Intermittent Power Resource or Intermittent Settlement Only Resource. If the winter capacity of the offer composed of separate resources in any month is higher than the summer Qualified Capacity, then the capacity offered from the winter resources will be reduced pro-rata to equal the summer Qualified Capacity.

- (d) If an offer is composed of separate resources, and is intended to meet the Local Sourcing Requirement in an import-constrained Capacity Zone, then each resource comprising the offer must be located in that import-constrained Capacity Zone.
- (e) If an offer is composed of separate resources, and is intended to meet the capacity requirement in the Rest-of-Pool Capacity Zone, then each resource comprising the offer must be located in a Capacity Zone that is not export-constrained.
- (f) If an offer is composed of separate resources, and is for capacity in an export-constrained Capacity Zone, then each resource comprising the offer must be located inside of the export-constrained Capacity Zone or be located in any non-export constrained Capacity Zone.
- (g) A Real-Time Emergency Generation Resource may only participate in an offer composed of separate resources as a winter resource if the summer resource is also a Real-Time Emergency Generation Resource.

### III.13.1.5.A. Notification of FCA Qualified Capacity.

No later than 5 Business Days after the deadline for submission of offers composed of separate resources, the ISO shall notify the Project Sponsor or Lead Market Participant for each New Generating Capacity Resource, New Import Capacity Resource, and New Demand Resource of the resource's final FCA Qualified Capacity for the Forward Capacity Auction. Such notification will detail the resource's financial assurance requirements in accordance with Section III.13.1.9.

### III.13.1.6. Self-Supplied FCA Resources.

Where a Project Sponsor elects to designate all or a portion of a New Generating Capacity Resource or an Existing Generating Capacity Resource as a Self-Supplied FCA Resource, the Project Sponsor must make such designation in writing to the ISO no later than the date by which the Project Sponsor is required to submit the financial assurance deposit and, if the Project Sponsor is not also the associated load serving entity, the Project Sponsor must at that time provide written confirmation from the load serving entity regarding the Self-Supplied FCA Resource designation. A New Import Capacity Resource or Existing Import Capacity Resource may be designated as a Self-Supplied FCA Resource. All Self-Supplied FCA Resources shall be subject to the eligibility and locational requirements in this Section III.13.1.6. If designated as a Self-Supplied FCA Resource and otherwise accepted in the qualification process, the resource will clear in the Forward Capacity Auction as described in Section III.13.2.3.2(c)

and, with the exception of demand programs for Self-Supplied FCA Resources, shall offset an equal amount of the load serving entity's share of Installed Capacity Requirement in the Capacity Commitment Period. A load serving entity seeking to self-supply using a Demand Resource shall realize the benefit through the actual reduction in its annual system coincident peak load, shall not receive credit for a resource and, therefore, is not required to participate in the qualification process described in this Section III.13.1. All designations as a Self-Supplied FCA Resource in the Forward Capacity Auction qualification process are binding.

### III.13.1.6.1. Self-Supplied FCA Resource Eligibility.

Where all or a portion of a resource is designated as a Self-Supplied FCA Resource, it shall also maintain its status as a New Generating Capacity Resource, Existing Generating Capacity Resource, New Import Capacity Resource or Existing Import Capacity Resource, and must satisfy the Forward Capacity Auction qualification process requirements set forth in the remainder of Section III.13.1 applicable to that resource type, in addition to the requirements of this Section III.13.1.6. Where an offer composed of separate resources is designated as a Self-Supplied FCA Resource, all of the requirements and deadlines specified in Section III.13.1.5 shall apply to that offer, in addition to the requirements of this Section III.13.1.6. The total quantity of capacity that an load serving entity designates as Self-Supplied FCA Resources may not exceed the load serving entity's projected share of the Installed Capacity Requirement during the Capacity Commitment Period which shall be calculated by determining the load serving entity's most recent percentage share of the Installed Capacity Requirement multiplied by the projected Installed Capacity Requirement for the commitment year. No resource may be designated as a Self-Supplied FCA Resource for more MW than the lesser of that resource's summer Qualified Capacity and winter Qualified Capacity.

### III.13.1.6.2. Locational Requirements for Self-Supplied FCA Resources.

In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource for a load in an import-constrained Capacity Zone, the Self-Supplied FCA Resource must be located in the same Capacity Zone as the associated load, unless the Self-Supplied FCA Resource is a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights. In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource in an export-constrained Capacity Zone for a load outside that export-constrained Capacity Zone, the Self-Supplied FCA Resource must be a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights.

### III.13.1.7. Internal Market Monitor Review of Offers and Bids.

In addition to the other provisions of this Section III.13.1, the Internal Market Monitor shall have the authority to review in the qualification process each resource's summer and winter Seasonal Claimed Capability if it is significantly lower than historical values, and if the Internal Market Monitor determines that it may be an attempt to exercise physical withholding, the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)). Where an entity submits: (i) an offer as a New Generating Capacity Resource, a New Import Capacity Resource or a New Demand Resource; and (ii) a Static De-List Bid, a Permanent De-List Bid, an Export Bid or an Administrative Export De-List Bid in the same Forward Capacity Auction, the Internal Market Monitor shall take appropriate steps to ensure that the resource bid to de-list or export in the Forward Capacity Auction is not inappropriately replaced by that new capacity in a subsequent reconfiguration auction or Capacity Supply Obligation Bilateral. In its review of any offer or bid pursuant to this Section III.13.1.7, the Internal Market Monitor may consult with the Project Sponsor or Market Participant, as appropriate, to seek clarification, or to address questions or concerns regarding the materials submitted.

### III.13.1.8. Publication of Offer and Bid Information.

- (a) Resource name, quantity, price, and Load Zone (or interface, as applicable) in which the resource is located about each Permanent De-list Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (b) The quantity, price, and Load Zone (or interface, as applicable) in which the resource is located of each Static De-List Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (c) Name of submitter, quantity, and interface of Export Bids and Administrative Export Bids shall be published no later than 15 days after the Forward Capacity Auction is conducted.
- (d) Name of submitter, quantity, and interface about offers from New Import Capacity Resources shall be published no later than 15 days after the Forward Capacity Auction is conducted.
- (e) If a Permanent De-List Bid above \$1.00/kW-month or a Static De-List Bid is approved by the Internal Market Monitor, resource name, quantity, price, and Load Zone (or interface, as applicable) in which the resource is located shall be published no later than 15 days after the Forward Capacity Auction is conducted.

(f) The name of each Lead Market Participant submitting de-list bids, as well as the number and type of de-list bids submitted by each Lead Market Participant, shall be published no later than three Business Days after the ISO issues the qualification determination notifications described in Sections III.13.1.1.2.8, III.13.1.2.4, and III.13.1.3.5.7. Authorized Persons of Authorized Commissions will be provided confidential access to full information about posted Static De-list Bids and Permanent De-List Bids upon request pursuant to Section 3.3 of the ISO New England Information Policy.

#### III.13.1.9. Financial Assurance.

Except as noted in this Section III.13.1.9, all financial assurance requirements associated with Forward Capacity Auctions and annual reconfiguration auctions and other payments and charges resulting from the Forward Capacity Market shall be governed by the ISO New England Financial Assurance Policy. The ISO and the NEPOOL Budget and Finance Subcommittee shall reconsider these financial assurance requirements no later than five years after the first Forward Capacity Auction is conducted.

# III.13.1.9.1. Financial Assurance for New Generating Capacity Resources and New Demand Resources Participating in the Forward Capacity Auction.

In order to participate in any Forward Capacity Auction, New Generating Capacity Resources (including Conditional Qualified New Generating Capacity Resources) and New Demand Resources shall be required to meet the financial assurance requirements as described in the ISO New England Financial Assurance Policy. Timely payment of the financial assurance deposit specified in the ISO New England Financial Assurance Policy by the Project Sponsor for a New Generating Capacity Resource or New Demand Resource accepted for participation in the Forward Capacity Auction constitutes a commitment to offer the full FCA Qualified Capacity of that New Generating Capacity Resource or New Demand Resource in the Forward Capacity Auction at the starting price. If this financial assurance deposit is not received within the timeframe specified in the ISO New England Financial Assurance Policy, the New Generating Capacity Resource or New Demand Resource shall not be permitted to participate in the Forward Capacity Auction. If capacity offered by the New Generating Capacity Resource or New Demand Resource clears in the Forward Capacity Auction, the deposit shall be applied toward the resource's financial assurance obligation, as described in the ISO New England Financial Assurance Policy. If no capacity offered by that New Generating Capacity Resource or New Demand Resource clears in the Forward Capacity Auction, the deposit will be returned pursuant to the terms of the ISO New England Financial Assurance Policy.

# III.13.1.9.2. Financial Assurance for New Generating Capacity Resources and New Demand Resources Clearing in a Forward Capacity Auction.

Where a New Generating Capacity Resource's offer or a New Demand Resource's offer is accepted in a Forward Capacity Auction, that resource must provide financial assurance as described in the ISO New England Financial Assurance Policy.

#### III.13.1.9.2.1. Failure to Provide Financial Assurance or to Meet Milestone.

If a New Generating Capacity Resource or New Demand Resource: (i) fails to provide the required financial assurance on any required date for any reason; or (ii) has its Capacity Supply Obligation terminated by the ISO pursuant to Section III.13.3.4(c), it shall lose its Capacity Supply Obligation (which shall then be entered by the ISO into subsequent annual reconfiguration auctions) and its right to any payments associated with that Capacity Supply Obligation, and it shall forfeit any financial assurance provided with respect to that Capacity Supply Obligation.

#### III.13.1.9.2.2. Release of Financial Assurance.

Once a New Generating Capacity Resource or New Demand Resource achieves Commercial Operation and is tested for its capacity rating, its financial assurance obligation shall be released pursuant to the terms of the ISO New England Financial Assurance Policy and it shall have the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy. If a New Generating Capacity Resource or New Demand Resource is only capable of delivering less than the amount of capacity that cleared in the Forward Capacity Auction, then the portion of its financial assurance associated with the shortfall shall be forfeited. Any resulting shortfall in capacity shall then be entered by the ISO into subsequent annual reconfiguration auctions.

### III.13.1.9.2.2.1. [Reserved.]

### III.13.1.9.2.3. Forfeit of Financial Assurance.

Where any financial assurance is forfeited pursuant to the provisions of this Section III.13, there shall be no further coverage for such forfeit under the ISO New England Billing Policy. Any financial assurance that is forfeited pursuant to the provisions of this Section III.13 shall be used to reduce payments incurred by load in the relevant Capacity Zone to replace that capacity.

### III.13.1.9.2.4. Financial Assurance for New Import Capacity Resources.

A New Import Capacity Resource that is backed by a new External Resource shall be subject to the same financial assurance requirements as a New Generating Capacity Resource, as described in Section III.13.1.9.1 and Section III.13.1.9.2. Once the new External Resource achieves Commercial Operation, the New Import Capacity Resource shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as described in Section III.13.1.9. A New Import Capacity Resource that is backed by one or more existing External Resources or by an external Control Area shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy.

### III.13.1.9.3. Qualification Process Cost Reimbursement Deposit.

For each New Capacity Show of Interest Form and New Demand Resource Show of Interest Form submitted for the purposes of qualifying for either a Forward Capacity Auction or reconfiguration auction, the Project Sponsor must submit to the ISO a refundable deposit in the amount shown in the table below ("Qualification Process Cost Reimbursement Deposit"). The Qualification Process Cost Reimbursement Deposit must be received in accordance with the ISO New England Billing Policy. Such deposit shall be used for costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3. An additional Qualification Process Cost Reimbursement Deposit is not required if: (i) the Project Sponsor is actively seeking qualification for another Forward Capacity Auction or annual reconfiguration auction, or is having the project's critical path schedule monitored pursuant to Section III.13.3; and (ii) the costs already incurred in the qualification process and critical path schedule monitoring do not equal or exceed 90 percent of the amount of the previously-submitted Qualification Process Cost Reimbursement Deposit(s). The ISO shall provide the Project Sponsor with an annual statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. In any case where resources are aggregated or disaggregated, the associated Qualification Process Cost Reimbursement Deposits will be adjusted as appropriate. After aggregation or disaggregation of resources, historical data regarding the costs already incurred in the qualification process of the original resources will no longer be provided. Coincident with the issuance of the annual statement, where incurred costs are equal to or greater than 90 percent of the Qualification Process Cost Reimbursement Deposit(s) previously submitted, the ISO will issue an invoice in the amount determined pursuant to the Qualification Process Cost Reimbursement Deposit table contained in Section III.13.1.9.3.1 plus any excess of costs incurred to date by the ISO and its consultants, including

the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3. Any refunds that may result from aggregation of resources will be issued coincident with the annual statement. Payment on the invoice must be received in accordance with the ISO New England Billing Policy. If the Project Sponsor fails to pay the amount due by the stated due date, the ISO will consider the resources that were invoiced withdrawn by the Project Sponsor. Such a withdrawal shall be irrevocable, and payment on the invoice after the due date will not remedy the failure to pay or the withdrawal.

### III.13.1.9.3.1. Partial Waiver Of Deposit.

A portion of the deposit shall be waived when there is an active Interconnection Request and an executed Interconnection Feasibility Study Agreement or Interconnection System Impact Study Agreement under Schedule 22 or 23 of the OATT or where a resource modification does not require a revision to the Interconnection Agreement.

|                     |                     | Imports and New<br>Demand Resources |                  |
|---------------------|---------------------|-------------------------------------|------------------|
| New Generating      | New Generating      | (including                          |                  |
| Resources ≥ 20      | Resources < 20      | Distributed                         | New Generating   |
| MW                  | MW and ≥ 2 MW       | Generation)                         | Resources < 2 MW |
| Including Up-rates, | Including Up-rates, |                                     |                  |
| Re-powering,        | Re-powering,        |                                     |                  |
| Environmental       | Environmental       |                                     |                  |
| Compliance &        | Compliance &        |                                     |                  |
| Intermittent Power  | Intermittent Power  |                                     |                  |
| Resources           | Resources           |                                     |                  |
| \$25,000            | \$7,500             | \$1,000                             | \$500            |
| With Executed       | With Executed       |                                     |                  |
| Interconnection     | Interconnection     |                                     |                  |
| Feasibility Study   | Feasibility Study   |                                     |                  |
| Agreement or        | Agreement or        |                                     |                  |
| System Impact       | System Impact       |                                     |                  |
| Study Agreement     | Study Agreement     |                                     |                  |
| \$15,000            | \$6500              | n/a                                 | n/a              |

### III.13.1.9.3.2. Settlement of Costs.

# III.13.1.9.3.2.1. Settlement Of Costs Associated With Resources Participating In A Forward Capacity Auction Or Reconfiguration Auction.

Upon the latter of: (i) the first day of the Capacity Commitment Period for which a resource offers into the Forward Capacity Market or (ii) the date on which the entire resource is accepted by the ISO for Commercial Operation, the ISO shall provide the Project Sponsor with a statement in writing of the costs

incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. If any portion of the Qualification Process Cost Reimbursement Deposit exceeds the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s) associated with the qualification process and critical path schedule monitoring, the ISO shall refund to the Project Sponsor the excess including interest calculated in accordance with 18 CFR § 35.19a(a)(2). If the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring exceed the Qualification Process Cost Reimbursement Deposit, the Project Sponsor shall pay such excess, including interest calculated in accordance with 18 CFR § 35.19a(a)(2) – For Demand Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

# III.13.1.9.3.2.2. Settlement Of Costs Associated With Resources That Withdraw From A Forward Capacity Auction Or Reconfiguration Auction.

Upon the withdrawal or failure to meet the requirements of the qualification process set forth in Section III.13.1, the ISO shall provide the Project Sponsor with a statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. A Project Sponsor that withdraws or is deemed to have withdrawn its request for qualification shall pay to the ISO all costs prudently incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. The ISO shall refund to the Project Sponsor any portion of the Qualification Process Cost Reimbursement Deposit that exceeds the costs associated with the qualification process and critical path schedule monitoring incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), including interest calculated in accordance with 18 CFR § 35.19a(a)(2). The ISO shall charge the Project Sponsor the amount of such costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), that exceeds the Qualification Process Cost Reimbursement Deposit, including interest calculated in accordance with 18 CFR § 35.19a(a)(2). For Demand Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

### III.13.1.9.3.2.3. Crediting Of Reimbursements.

Cost reimbursements received (excluding amounts passed through to the ISO's consultants and to affected Transmission Owner(s)) by the ISO pursuant to this Section III.13.1.9.3.2 shall be credited against revenues received by the ISO pursuant to Section IV.A.6.1 of the Transmission, Markets and Services Tariff.

# III.13.1.10. Forward Capacity Auction Qualification Schedule.

The table below provides the major dates and deadlines for each of the first eight Forward Capacity Auctions.

| New Capacity Show of<br>Interest Submission<br>Window  | Existing<br>Capacity<br>Qualification<br>Deadline | New Capacity Qualification Deadline | First Day of Forward Capacity Auction for the Capacity Commitment Period | Capacity Commitment<br>Period Begins |
|--|---|-------------------------------------|--|--------------------------------------|
| For all resources except Demand Resources, Nov. 1, 2006 through Jan. 2, 2007 For Demand Resources, Dec. 18, 2006 through Feb. 28, 2007 | Apr. 30, 2007                                     | June 15, 2007                       | Feb. 4, 2008   | June 1, 2010                         |
| Sept. 18, 2007 through<br>Nov. 14, 2007  | Mar. 14, 2008                                     | Apr. 29, 2008                       | Dec. 8, 2008   | June 1, 2011                         |
| July 15, 2008 through<br>Sep. 16, 2008   | Feb. 3, 2009                                      | Feb. 17, 2009                       | Oct. 5, 2009   | June 1, 2012                         |
| May 15, 2009 through<br>July 14, 2009  | Dec. 1, 2009                                      | Dec. 15, 2009                       | Aug. 2, 2010   | June 1, 2013                         |
| Mar. 15, 2010 through<br>May 14, 2010  | Oct. 1, 2010                                      | Oct. 15, 2010                       | June 6, 2011   | June 1, 2014                         |
| Mar. 1, 2011 through<br>Mar. 14, 2011  | Aug. 1, 2011                                      | Aug. 15, 2011                       | Apr. 2, 2012   | June 1, 2015                         |
| Jan. 3, 2012 through<br>Jan. 17, 2012  | June 1, 2012                                      | June 15, 2012                       | Feb. 4, 2013   | June 1, 2016                         |
| Feb. 14, 2013 through<br>Feb. 28, 2013   | June 3, 2013                                      | June 17, 2013                       | Feb. 3, 2014   | June 1, 2017                         |

Beginning with the timeline for the Capacity Commitment Period beginning on June 1, 2017 (the eighth Forward Capacity Auction), and for each Capacity Commitment Period thereafter, the deadlines will be consistent for each Capacity Commitment Period, as follows:

- (a) each Capacity Commitment Period shall begin in June;
- (b) the New Capacity Show of Interest Submission Window will be in February (after the Forward Capacity Auction for the prior Capacity Commitment Period), approximately four years and three months before the beginning of the Capacity Commitment Period;
- (c) the Existing Capacity Qualification Deadline will be in June just over four years before the beginning of the Capacity Commitment Period;
- (d) the New Capacity Qualification Deadline will be in June or July that is just under four years before the beginning of the Capacity Commitment Period; and
- (e) the Forward Capacity Auction for the Capacity Commitment Period will begin in February approximately three years and four months before the beginning of the Capacity Commitment Period.

The table below shows this generic timeline for the Capacity Commitment Period beginning in yer "X", where X is any year after 2015.

|              |               |                 | First Day of    |                     |
|--------------|---------------|-----------------|-----------------|---------------------|
|              |               |                 | Forward         |                     |
| New Capacity |               |                 | Capacity        |                     |
| Show of      | Existing      |                 | Auction for the |                     |
| Interest     | Capacity      | New Capacity    | Capacity        |                     |
| Submission   | Qualification | Qualification   | Commitment      | Capacity Commitment |
| Window       | Deadline      | Deadline        | Period          | Period Begins       |
| Feb. (X-4)   | June (X-4)    | June/July (X-4) | Feb. (X-3)      | June X              |

### III.13.5. Bilateral Contracts in the Forward Capacity Market.

Market Participants shall be permitted to enter into Capacity Supply Obligation Bilaterals, Capacity Load Obligation Bilaterals and Supplemental Availability Bilaterals in accordance with this Section III.13.5, with the ISO serving as Counterparty in each such transaction. Market Participants may not offset a Capacity Load Obligation with a Capacity Supply Obligation.

### III.13.5.1. Capacity Supply Obligation Bilaterals.

A resource having a Capacity Supply Obligation seeking to shed that obligation ("Capacity Transferring Resource") may enter into a bilateral transaction to transfer its Capacity Supply Obligation, in whole or in part ("Capacity Supply Obligation Bilateral"), to a resource, or portion thereof, having Qualified Capacity for that Capacity Commitment Period that is not already obligated ("Capacity Acquiring Resource"), subject to the following limitations

- (a) A monthly Capacity Supply Obligation Bilateral must be coterminous with a calendar month, and an annual Capacity Supply Obligation Bilateral must be coterminous with a Capacity Commitment Period.
- (b) A Capacity Supply Obligation Bilateral may not transfer a Capacity Supply Obligation amount that is greater than the lowest monthly Capacity Supply Obligation of the Capacity Transferring Resource during the period covered by the Capacity Supply Obligation Bilateral. A Capacity Supply Obligation Bilateral may not transfer a Capacity Supply Obligation amount that is greater than the lowest monthly amount of unobligated Qualified Capacity (that is, Qualified Capacity as determined in the most recent Forward Capacity Auction or reconfiguration auction qualification process that is not subject to a Capacity Supply Obligation for the relevant time period) of the Capacity Acquiring Resource during the period covered by the Capacity Supply Obligation Bilateral, as determined in the qualification process for the most recent Forward Capacity Auction or annual reconfiguration auction prior to the submission of the Capacity Supply Obligation Bilateral to the ISO.
- (c) A Capacity Supply Obligation Bilateral may not transfer a Capacity Supply Obligation to a Capacity Acquiring Resource where that Capacity Acquiring Resource's unobligated Qualified Capacity is unobligated as a result of an Export Bid or Administrative Export De-List Bid that cleared in the Forward Capacity Auction.

(d) A Real-Time Emergency Generation Resource may participate in a Capacity Supply Obligation Bilateral as either a Capacity Transferring Resource or a Capacity Acquiring Resource, provided, however, that where a Real-Time Emergency Generation Resource participates in a Capacity Supply Obligation Bilateral as a Capacity Acquiring Resource, the Capacity Transferring Resource must also be a Real-Time Emergency Generation Resource.

### (e) [Reserved.]

- (f) The Capacity Transferring Resource and the Capacity Acquiring Resource that are parties to a Capacity Supply Obligation Bilateral must be located in the same Capacity Zone, or the path from the Capacity Transferring Resource to the Capacity Acquiring Resource must flow across adjacent Capacity Zones in the direction of the modeled interface constraint(s), as such Capacity Zones and interface constraints are defined following the Forward Capacity Auction conducted for the Capacity Commitment Period to which the transferred Capacity Supply Obligation applies.
- (g) If the Capacity Acquiring Resource is an Import Capacity Resource, then the Capacity Transferring Resource must also be an Import Capacity Resource on the same external interface.
- (h) A resource, or a portion thereof, that has been designated as a Self-Supplied FCA Resource may transfer the self-supplied portion of its Capacity Supply Obligation by means of Capacity Supply Obligation Bilateral. In such a case, however, the Capacity Acquiring Resource shall not become a Self-Supplied FCA Resource as a result of the transaction.
- (i) A monthly Capacity Supply Obligation may not be acquired by any resource on an approved outage for the relevant Capacity Commitment Period month.
- (j) A resource that has not achieved Commercial Operation by the submission deadline for a monthly Capacity Supply Obligation Bilateral may not submit a transaction as a Capacity Acquiring Resource for that Capacity Commitment Period month, unless the resource has a negative Capacity Supply Obligation, in which case it may submit a Capacity Supply Obligation Bilateral in an amount up to the absolute value of its Capacity Supply Obligation.

#### III.13.5.1.1. Process for Approval of Capacity Supply Obligation Bilaterals.

### III.13.5.1.1.1. Timing.

The Lead Market Participant or Project Sponsor for either the Capacity Transferring Resource or the Capacity Acquiring Resource may submit a Capacity Supply Obligation Bilateral to the ISO during submittal windows, as defined in the ISO New England Manuals and ISO New England Operating Procedures. The ISO will issue a submission schedule for annual Capacity Supply Obligation Bilaterals as soon as practicable after the issuance of Forward Capacity Auction results. Monthly Capacity Supply Obligation Bilaterals may only be submitted and confirmed after the results of the third annual reconfiguration auction have been issued (except as described in Section III.13.4.2.1.3(c)) and prior to the closing of the monthly Capacity Supply Obligation Bilateral window, which will occur prior to the monthly reconfiguration auction. ISO New England will review all confirmed monthly Capacity Supply Obligation Bilaterals for each upcoming Obligation Month for reliability needs immediately preceding the monthly reconfiguration auction. A Capacity Supply Obligation Bilateral must be confirmed by the party other than the party submitting the Capacity Supply Obligation Bilateral to the ISO during the same submittal window and no later than the same deadline that applies to submission of the Capacity Supply Obligation Bilateral.

#### **III.13.5.1.1.2.** Application.

The submission of a Capacity Supply Obligation Bilateral to the ISO shall include the following: (i) the resource identification number of the Capacity Transferring Resource; (ii) the amount of the Capacity Supply Obligation being transferred in MW amounts up to three decimal places; (iii) the term of the transaction; and (iv) the resource identification number of the Capacity Acquiring Resource. If the parties to a Capacity Supply Obligation Bilateral so choose, they may also submit a price, in \$/kW-month, to be used by the ISO in settling the Capacity Supply Obligation Bilateral. If no price is submitted, the ISO shall use a default price of \$0.00/kW-month.

#### III.13.5.1.1.3. ISO Review.

- (a) The ISO shall review the information provided in support of the Capacity Supply Obligation Bilateral, and shall reject the Capacity Supply Obligation Bilateral if any of the provisions of this Section III.13.5.1 are not met.
- (b) Each Capacity Supply Obligation Bilateral shall be subject to a reliability review by the ISO to determine whether the transaction would result in a violation of any NERC or NPCC (or their successors) criteria, or ISO New England System Rules, during the Capacity Commitment Period associated with the transaction. Capacity Supply Obligation Bilaterals shall be reviewed by the ISO to ensure the regional and

local adequacy achieved through the Forward Capacity Auction and other reliability needs are maintained. The ISO's review will consider the location and operating and rating limitations of resources associated with the Capacity Supply Obligation Bilateral to ensure reliability standards will remain satisfied if the capacity associated with the Capacity Transferring Resource is withdrawn and the capacity associated with the Capacity Acquiring Resource is accepted. The ISO's reliability reviews will assess transactions based on operable capacity needs while considering any approved or interim approved transmission outage information and any approved generation or Demand Response Resource outage information, and will include transmission security studies. For a monthly Capacity Supply Obligation Bilateral, the ISO shall obtain and consider information from the Local Control Center regarding whether the Capacity Supply Obligation of the Capacity Transferring Resource is needed for local system conditions and whether it is adequately replaced by the Acquiring Resource. The ISO will approve or reject Capacity Supply Obligation Bilaterals based on the order in which they are confirmed. If multiple Capacity Supply Obligation Bilaterals are submitted between the same resources, they may be reviewed together as one transaction and the most recent confirmation time among the related transactions will be used to determine the review order of the grouped transaction. Transactions that cannot meet the applicable reliability needs will only be accepted or rejected in their entirety and the resources will not be accepted or rejected in part for purposes of that transaction. Where the ISO has determined that a Capacity Supply Obligation Bilateral must be rejected for reliability reasons the Lead Market Participant or Project Sponsor, as appropriate, for the Capacity Transferring Resource and the Capacity Acquiring Resource shall be notified as soon as practicable of the rejection and of the reliability need prompting such rejection.

(c) Each Capacity Supply Obligation Bilateral shall be subject to a financial assurance review by the ISO. If the Capacity Transferring Resource and the Capacity Acquiring Resource are not both in compliance with all applicable provisions of the ISO New England Financial Assurance Policy, including those regarding Capacity Supply Obligation Bilaterals, the ISO shall reject the Capacity Supply Obligation Bilateral.

### III.13.5.1.1.4. Approval.

Upon approval of a Capacity Supply Obligation Bilateral, the Capacity Supply Obligation of the Capacity Transferring Resource shall be reduced by the amount set forth in the Capacity Supply Obligation Bilateral, and the Capacity Supply Obligation of the Capacity Acquiring Resource shall be increased by the amount set forth in the Capacity Supply Obligation Bilateral.

### III.13.5.2. Capacity Load Obligations Bilaterals.

A Market Participant having a Capacity Load Obligation seeking to shed that obligation ("Capacity Load Obligation Transferring Participant") may enter into a bilateral transaction to transfer all or a portion of its Capacity Load Obligation in a Capacity Zone ("Capacity Load Obligation Bilateral") to any Market Participant seeking to acquire a Capacity Load Obligation ("Capacity Load Obligation Acquiring Participant"). A Capacity Load Obligation Bilateral must be in whole calendar month increments, may not exceed one year in duration, and must begin and end within the same Capacity Commitment Period. A Capacity Load Obligation Transferring Participant will be permitted to transfer, and a Capacity Load Obligation Acquiring Participant will be permitted to acquire, a Capacity Load Obligation if after entering into a Capacity Load Obligation Bilateral and submitting related information to the ISO within the specified submittal time period, the ISO approves such Capacity Load Obligation Bilateral.

### III.13.5.2.1. Process for Approval of Capacity Load Obligation Bilaterals.

### III.13.5.2.1.1. Timing.

Either the Capacity Load Obligation Transferring Participant or the Capacity Load Obligation Acquiring Participant may submit a Capacity Load Obligation Bilateral to the ISO. All Capacity Load Obligation Bilaterals must be submitted to the ISO in accordance with resettlement provisions as described in ISO New England Manuals. However, to be included in the initial settlement of payments and charges associated with the Forward Capacity Market for the first month of the term of the Capacity Load Obligation Bilateral, a Capacity Load Obligation Bilateral must be submitted to the ISO no later than 12:00 pm on the second Business Day after the end of that month (though a Capacity Load Obligation Bilateral submitted at that time may be revised by the parties to the transaction throughout the resettlement process). A Capacity Load Obligation Bilateral must be confirmed by the party other than the party submitting the Capacity Load Obligation Bilateral to the ISO no later than the same deadline that applies to submission of the Capacity Load Obligation Bilateral.

### **III.13.5.2.1.2.** Application.

The submission of a Capacity Load Obligation Bilateral to the ISO shall include the following: (i) the amount of the Capacity Load Obligation being transferred in MW amounts up to three decimal places; (ii) the term of the transaction; (iii) identification of the Capacity Load Obligation Transferring Participant and the Capacity Load Obligation Acquiring Participant; and (iv) the Capacity Zone in which the Capacity Load Obligation is being transferred is located.

#### III.13.5.2.1.3. ISO Review.

The ISO shall review the information provided in support of the Capacity Load Obligation Bilateral and shall reject the Capacity Load Obligation Bilateral if any of the provisions of this Section II.13.5.2 are not met.

### III.13.5.2.1.4. Approval.

Upon approval of a Capacity Load Obligation Bilateral, the Capacity Load Obligation of the Capacity Load Obligation Transferring Participant in the Capacity Zone specified in the submission to the ISO shall be reduced by the amount set forth in the Capacity Load Obligation Bilateral and the Capacity Load Obligation of the Capacity Load Obligation Acquiring Participant in the specified Capacity Zone shall be increased by the amount set forth in the Capacity Load Obligation Bilateral.

### III.13.5.3. Supplemental Availability Bilaterals.

A resource's availability score during a Shortage Event may be supplemented by entering into a Supplemental Availability Bilateral as described in this Section III.13.5.3.

### III.13.5.3.1. Designation of Supplemental Capacity Resources.

## III.13.5.3.1.1. Eligibility.

Demand Response Capacity Resources and Generating Capacity Resources that are not Intermittent Power Resources or Settlement Only Resources may be designated as Supplemental Capacity Resources. A Generating Capacity Resource may be designated as a Supplemental Capacity Resource in a MW amount up to the difference between the resource's CNR Capability (reduced by the hourly integrated delivered MW for any External Transaction sale or sales submitted in accordance with Section III.1.10.7(f) from that resource and its Capacity Supply Obligation in each day of the term in which it is designated to be a Supplemental Capacity Resource. A Demand Response Capacity Resource may be designated as a Supplemental Capacity Resource in a MW amount up to the difference between the resource's Qualified Capacity from the Forward Capacity Auction for the current Capacity Commitment Period pursuant to Section III.13.1.4.1 and its Capacity Supply Obligation in each day of the term in which it is designated to be a Supplemental Capacity Resource.

### III.13.5.3.1.2. Designation.

The designation of a Supplemental Capacity Resource must be made by the resource's Lead Market Participant. The designation shall indicate the term for which the resource is designated as a Supplemental Capacity Resource, which shall be in Operating Day increments, no less than one Operating Day, and no greater than one calendar month. Such designation shall indicate the MW amount being designated as a Supplemental Capacity Resource, and the Capacity Zone in which the resource is located. Such designation must be submitted to the ISO no later than the deadline for the submission of Supply Offers in the Day-Ahead Energy Market for the first Operating Day of the indicated term.

#### III.13.5.3.1.3. ISO Review.

The ISO shall review the information provided in submission of the designation as a Supplemental Capacity Resource, and shall reject the designation for any of the hours in which any of the provisions of this Section III.13.5.3.1 are not met.

### III.13.5.3.1.4. Effect of Designation.

Regardless of whether it ever becomes subject to a Supplemental Availability Bilateral as described in Section III.13.5.3.2, the portion of a resource designated as a Supplemental Capacity Resource is subject to the same energy market offer requirements applicable to a resource having a Capacity Supply Obligation as described in Sections III.13.6.1.1.1 and III.13.6.1.1.2 for Generating Capacity Resources and as described in Sections III.13.6.1.5.1. and III.13.6.1.5.2. for Demand Response Capacity Resources for the entire term indicated in the designation described in Section III.13.5.3.1.2.

### III.13.5.3.2. Submission of Supplemental Availability Bilaterals.

The Lead Market Participant for a resource previously designated as a Supplemental Capacity Resource in accordance with the provisions of Section III.13.5.3.1 for a term that included a Shortage Event may submit a Supplemental Availability Bilateral to the ISO assigning all or a portion of its available capability up to its designated supplemental capacity in each hour of that Shortage Event to a Generating Capacity Resource or Demand Response Capacity Resource having a Capacity Supply Obligation during that Shortage Event ("Supplemented Capacity Resource"). No other Market Participant may submit a Supplemental Availability Bilateral. The Supplemental Capacity Resource and the Supplemented Capacity Resource must either: (i) be located in the same Reserve Zone (although in no case may a Supplemental Capacity Resource located in an export-constrained Capacity Zone provide supplemental availability outside of that export-constrained Capacity Zone); or (ii) be located in different Reserve Zones such that direction of flow between the Supplemental Capacity Resource and the Supplemented Capacity Resource is counter to any Reserve Zone or Capacity Zone constraint. For purposes of this Section III.13.5.3.2, a Reserve Zone having a locational reserve requirement (established pursuant to Section III.9.2.2) that is less than or equal to zero shall be considered to be unconstrained with respect to

the neighboring Reserve Zone. A Supplemental Capacity Resource may submit Supplemental Availability Bilaterals with multiple Supplemented Capacity Resources, but each MW of supplemental capacity may only be assigned to one Supplemented Capacity Resource. No Supplemental Capacity Resource may itself be a Supplemented Capacity Resource for an hour.

### III.13.5.3.2.1. Timing.

A Supplemental Availability Bilateral must be submitted in accordance with resettlement provisions as described in ISO New England Manuals. However, to be included in the initial settlement of payments and charges associated with the Forward Capacity Market for the month associated with the Supplemental Availability Bilateral, a Supplemental Availability Bilateral must be submitted to the ISO no later than 12:00 pm on the second Business Day after the end of that month, or at such later deadline as specified by the ISO upon notice to Market Participants (though a Supplemental Availability Bilateral may be revised by the parties to the transaction throughout the resettlement process). A Supplemental Availability Bilateral must be confirmed by the Lead Market Participant for the Supplemented Capacity Resource no later than the same deadline that applies to submission of the Supplemental Availability Bilateral.

#### **III.13.5.3.2.2.** Application.

The submission of a Supplemental Availability Bilateral to the ISO shall include the following: (i) the resource identification number for the Supplemental Capacity Resource; (ii) the resource identification number for the Supplemented Capacity Resource; (iii) the MW amount of capacity being assigned from the Supplemental Capacity Resource to the Supplemented Capacity Resource; (iv) the term of the transaction, which shall be in hourly increments coinciding with hourly boundaries, no less than one hour, and no greater than one calendar month.

### III.13.5.3.2.3. ISO Review.

The ISO shall review the information provided in submission of the Supplemental Availability Bilateral, and shall reject the Supplemental Availability Bilateral if any of the provisions of this Section III.13.5.3 are not met. The ISO shall reject the applicability of a Supplemental Availability Bilateral in any hour of a Shortage Event unless: (i) the Supplemental Capacity Resource was on-line and following ISO dispatch instructions during that hour of the Shortage Event and the MW amount of capacity being assigned from the Supplemental Capacity Resource is (a) less than or equal to the difference between the Generating Capacity Resource's Economic Maximum Limit as submitted or redeclared by the Lead Market Participant and the Supplemental Capacity Resource's Capacity Supply Obligation or (b) less than or equal to the difference between (the greater of the Demand Response Capacity Resource's Real-Time

Demand Reduction Obligation <u>plus Net Supply</u> or the lesser of ((the Demand Response Capacity Resource's Demand Response Baseline as adjusted pursuant to Section III.8<u>B</u>.5, <u>plus the Economic Maximum Limit for any associated available Net Supply Generator Assets)</u>, the Hourly Adjusted Audited Demand Reduction, or (the Maximum Reduction as submitted or redeclared by the Lead Market Participant <u>plus the Economic Maximum Limit of associated Net Supply Generator Assets)</u>), adjusted for average avoided peak transmission and distribution losses as addressed in Section III.13.7.1.5.10, and the Supplemental Capacity Resource's Capacity Supply Obligation; or (ii) the Supplemental Capacity Resource from the Supplemental Capacity Resource is less than or equal to the difference between the sum of the Supplemental Capacity Resource's Real-Time Reserve Designations of TMNSR and TMOR and the Supplemental Capacity Resource's Capacity Supply Obligation.

### III.13.5.3.2.4. Effect of Supplemental Availability Bilateral.

A Supplemental Availability Bilateral does not affect in any way either party's Capacity Supply Obligation or the rights and obligations associated therewith. The sole effect of a Supplemental Availability Bilateral is to modify the Supplemented Capacity Resource's availability score as described in Section III.13.7.1.1.4.

### III.13.6. Rights and Obligations.

Resources assuming a Capacity Supply Obligation through a Forward Capacity Auction or resources assuming or shedding a Capacity Supply Obligation through a reconfiguration auction or a Capacity Supply Obligation Bilateral shall comply with this Section III.13.6 for each Capacity Commitment Period. In the event a resource with a Capacity Supply Obligation assumed through a Forward Capacity Auction, reconfiguration auction, or Capacity Supply Obligation Bilateral can not be allowed to shed its Capacity Supply Obligation due to system reliability considerations, the resource shall maintain the Capacity Supply Obligation until the resource can be released from its Capacity Supply Obligation. No additional compensation shall be provided through the Forward Capacity Market if the resource fails to be released from its Capacity Supply Obligation.

### III.13.6.1. Resources with Capacity Supply Obligations.

A resource with a Capacity Supply Obligation assumed through a Forward Capacity Auction, reconfiguration auction, or a Capacity Supply Obligation Bilateral shall comply with the requirements of this Section III.13.6.1 during the Capacity Commitment Period, or portion thereof, in which the Capacity Supply Obligation applies.

### III.13.6.1.1. Generating Capacity Resources.

### III.13.6.1.1.1. Energy Market Offer Requirements.

A Generating Capacity Resource having a Capacity Supply Obligation shall be offered into both the Day-Ahead Energy Market and Real-Time Energy Market at a MW amount equal to or greater than its Capacity Supply Obligation whenever the resource is physically available. If the resource is physically available at a level less than its Capacity Supply Obligation, however, the resource shall be offered into both the Day-Ahead Energy Market and Real-Time Energy Market at that level. Day-Ahead Energy Market Supply Offers from such Generating Capacity Resources shall also meet one of the following requirements:

- (a) the sum of the Generating Capacity Resource's notification time plus start time plus minimum run time plus minimum down time is less than or equal to 72 hours; or
- (b) if the Generating Capacity Resource cannot meet the offer requirements in Section III.13.6.1.1.1(a) due to physical design limits, then the resource shall be offered into the Day-Ahead Energy Market at a MW amount equal to or greater than its Economic Minimum Limit at a price of zero

or shall be self-scheduled in the Day-Ahead Energy Market at a MW amount equal to or greater than the resource's Economic Minimum Limit.

# III.13.6.1.1.2. Requirement that Offers Reflect Accurate Generating Capacity Resource Operating Characteristics.

For each day, Day-Ahead Energy Market and Real-Time Energy Market offers for the listed portion of a resource must reflect the then-known unit-specific operating characteristics (taking into account, among other things, the physical design characteristics of the unit) consistent with Good Utility Practice. Resources must re-declare to the ISO any changes to the offer parameters that occur in real time to reflect the known capability of the resource. A resource failing to comply with this requirement shall be subject to economic penalties described in Appendix B, in addition to any applicable availability penalties pursuant to Section III.13.7.2.7.1.2.

### III.13.6.1.1.3. [Reserved.]

### III.13.6.1.1.4. [Reserved.]

# III.13.6.1.1.5. Additional Requirements for Generating Capacity Resources.

Generating Capacity Resources having a Capacity Supply Obligation are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals and ISO New England Operating Procedures;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals and Market Rule 1 and the requirement to provide to the ISO, upon request and as soon as practicable, confirmation of gas volume schedules sufficient to deliver the energy scheduled for each Generating Capacity Resource using natural gas;
- (c) outage requirements in accordance with the ISO New England Manuals and ISO New England Operating Procedures, provided, however, that the portion of a resource having no Capacity Supply Obligation is not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

## III.13.6.1.2. Import Capacity Resources.

## III.13.6.1.2.1. Energy Market Offer Requirements.

A Market Participant must offer energy associated with an Import Capacity Resource with a Capacity Supply Obligation into the Day-Ahead Energy Market and Real-Time Energy Market as one or more External Transactions for every hour of each Operating Day at the same external interface totaling an amount (MW) equal to the Capacity Supply Obligation unless the Import Capacity Resource is associated with an External Resource that is on an outage. In all cases the Import Capacity Resource is subject to the provisions in Section III.13.7 for the entire Capacity Supply Obligation of the Import Capacity Resource. A Market Participant with an Import Capacity Resource that fails to comply with this requirement may be subject to sanctions pursuant to Appendix B, in addition to any applicable availability penalties pursuant to Section III.13.7.2.7.2 for failing to deliver the External Transaction or External Transactions in the energy market as described in the ISO New England System Rules.

The offer requirements of Section III.13.6.1.2.1 will not apply to External Transactions associated with the VJO and NYPA Import Capacity Resources specified in Section III.13.1.3.3(c) for the duration of the contract provided the transactions are self-scheduled in both the Day-Ahead Energy Market and Real-Time Energy Market. If the energy associated with these contracts is not self-scheduled, the offer requirements and provisions of this section will apply to the applicable contract.

- (a) All priced External Transactions associated with an Import Capacity Resource with a Capacity Supply Obligation must be offered each hour at or below the greater of either: (1) the offer threshold specified in Section III.13.6.1.2.1(b) for the Operating Day; (2) the offer threshold determined for the prior Operating Day; and (3) for any priced External Transactions from the New York Control Area the corresponding hourly day-ahead energy price (NYISO Location-Based Marginal Price) at the source interface.
- (b) A daily offer threshold will be determined for each Operating Day and will apply to each hour of the Operating Day. From June 1, 2010 to May 31, 2013 the daily offer threshold is equal to the product of the PER Proxy Unit heat rate as described in Section III.13.7.2.7.1.1.1(b)(iii) and the lower of ultra low-sulfur No. 2 oil measured at New York Harbor plus a seven percent markup for transportation of day-ahead gas measured at the Algonquin City Gate, as determined on a daily basis. After May 31, 2013 the daily offer threshold is equal to the product of the applicable Forward Reserve Heat Rate as described in Section III.9.6.2 and the lower of ultra low-sulfur No. 2 oil measured at New York Harbor plus a seven

percent markup for transportation or day-ahead gas measured at the Algonquin City Gate, as determined on a daily basis.

- (c) Submittal of External Transactions to the Day-Ahead Energy Market in support of a Capacity Supply Obligation for an Import Capacity Resource requires submittal of matching energy transactions to the Real-Time Energy Market; the External Transactions submitted to the Real-Time Energy Market must match the External Transactions submitted to the Day-Ahead Energy Market, subject to the right to submit different prices into the Real-Time Energy Market.
- (d) External Transactions submitted to the Real-Time Energy Market in support of a Capacity Supply Obligation for an Import Capacity Resource must be submitted prior to the offer submission deadline for the Day-Ahead Energy Market the day before the Operating Day for which they are intended to be scheduled.
- (e) A Market Participant submitting a priced External Transaction supporting an Import Capacity Resource with a Capacity Supply Obligation to the Real-Time Energy Market on an external interface where advance transmission reservations are required must link the transaction to the associated transmission reservation and NERC E-Tag no later than one hour before the operating hour in order to be eligible for scheduling in the Real-Time Energy Market. If a Market Participant does not link the transaction to the associated transmission reservation and NERC E-Tag in the Real-Time Energy Market for any hour during which the External Transaction would otherwise have been economically and reliably scheduled in the Real-Time Energy Market, the associated Import Capacity Resource shall be treated as having not delivered energy for the hour despite ISO requested dispatch under Section III.13.7.1.2 and III.13.7.2.7.2. A Market Participant submitting any other External Transaction to the Real-Time Energy Market must comply with the requirements in Section III.1.10.7(e) with respect to linking the transaction to the associated transmission reservation and NERC E-Tag.

### III.13.6.1.2.2. Additional Requirements for Import Capacity Resources.

Import Capacity Resources are subject to the following additional requirements:

(a) information submittal requirements for External Transactions associated with resource or Control Area backed Import Capacity Resources as detailed in the ISO New England Manuals;

- (b) resource backed Import Capacity Resources shall be subject to the outage requirements as detailed in the ISO New England Manuals and ISO New England Operating Procedures. Control Area backed Import Capacity Resources are not subject to such outage requirements;
- (c) resource backed Import Capacity Resources are subject to the voluntary and mandatory rescheduling of maintenance procedures outlined in the ISO New England Operating Procedures and ISO New England Manuals.
- (d) at the time of submittal, each External Transaction shall reference the associated Import Capacity Resource.

#### III.13.6.1.3. Intermittent Power Resources.

## III.13.6.1.3.1. Energy Market Offer Requirements.

Intermittent Power Resources may submit offers into the Day-Ahead Energy Market. Such resources are required to submit offers for use in the Real-Time Energy Market consistent with the characteristics of the resource. Day Ahead projections of output shall be submitted as detailed in the ISO New England Manuals. For purposes of calculating Real-Time NCPC Charges, Intermittent Power Resources shall have a generation deviation of zero.

## III.13.6.1.3.2. [Reserved.]

#### **III.13.6.1.3.3.** Additional Requirements for Intermittent Power Resources.

Intermittent Power Resources are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals;
- (c) complying with outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals.

# III.13.6.1.4. Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources.

### III.13.6.1.4.1. Energy Market Offer Requirements.

Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Market.

### **III.13.6.1.4.2.** Additional Requirements for Settlement Only Resources.

Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources having a Capacity Supply Obligation are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals;
- (c) such resources are not subject to outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals.

#### III.13.6.1.5. Demand Resources.

### III.13.6.1.5.1. Energy Market Offer Requirements.

Critical Peak Demand Resources, Seasonal Peak Demand Resources, On-Peak Demand Resources and Real-Time Emergency Generation Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Markets. A Real-Time Demand Response Asset associated with a Real-Time Demand Response Resource may submit Demand Reduction Offers on a Day-Ahead and Real-Time basis pursuant to Appendix E.

A Demand Response Capacity Resource having a Capacity Supply Obligation shall submit Demand Reduction Offers through its Demand Response Resources and submit Supply Offers of any associated Net Supply Generator Assets, into both the Day-Ahead Energy Market and Real-Time Energy Market through its Demand Response Resources and associated Net Supply Generator Assets. The sum of the Demand Reduction Offers and Supply Offers must be equal to or greater than the Demand Response Capacity Resource's Capacity Supply Obligation whenever the Demand Response Resources and associated Net Supply Generator Assets are physically available. If the Net Supply Generator Asset is a Settlement Only Resource, then the Net Supply will not be represented in the offer for the Demand

Response Resource. If the Demand Response Resources and associated Net Supply Generator Assets are physically available at a level less than the Demand Response Capacity Resource's Capacity Supply Obligation, the sum of the Demand Reduction Offers and Supply Offers equal to that level shall be offered into both the Day-Ahead Energy Market and Real-Time Energy Market. Each Demand Reduction Offer from a Demand Response Resource made into the Day-Ahead Energy Market shall also meet one of the following requirements:

- (a) the sum of the Demand Response Resource's Demand Response Resource Notification Time plus Demand Response Resource Start-Up Time plus Minimum Reduction Time plus Minimum Time Between Reductions is less than or equal to 72 hours.
- (b) the sum of the Demand Response Resource's Minimum Reduction Time plus the Minimum Time Between Reductions is less than or equal to 24 hours.

Each Supply Offer for a Net Supply Generator Asset associated with a Demand Response Resource made into the Day-Ahead Energy Market shall also meet one of the following requirements:

- (a) the sum of the Net Supply Generator Asset's Notification Time plus Start-Up Time plus Minimum Run Time plus Minimum Down Time is less than or equal to 72 hours.
- (b) the sum of the Net Supply Generator Asset's Minimum Run Time plus Minimum Down Time is less than or equal to 24 hours.

# III.13.6.1.5.2. Requirement that Offers Reflect Accurate Demand Response Capacity Resource Operating Characteristics.

For each day, Demand Reduction Offers and, if applicable, Supply Offers of associated Net Supply Generator Assets, submitted into the Day-Ahead Energy Market and Real-Time Energy Market for the portion of a resource having a Capacity Supply Obligation must reflect the then-known operating characteristics of the resource. Resources must re-declare to the ISO any changes to the offer parameters that occur in real time to reflect the operating characteristics of the resource. A resource failing to comply with this requirement shall be subject to economic penalties described in Appendix B, in addition to any applicable availability penalties pursuant to Section III.13.7.2.7.1.2.

## III.13.6.1.5.3. Additional Requirements for Demand Resources.

Demand Resources shall comply with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals and the auditing and rating requirements as detailed in Section III.13.6.1.5.4 and the ISO New England Manuals. Demand Response Capacity Resources having a Capacity Supply Obligation are subject to the following additional requirements:

- (a) Operating Data collection requirements as detailed in the ISO New England Manuals and Market Rule 1:
- (b) outage requirements in accordance with the ISO New England Manuals and ISO New England Operating Procedures, provided, however, that the portion of a resource having no Capacity Supply Obligation is not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

## III.13.6.1.5.4. Demand Response Auditing.

Demand Resources shall be subject to ISO conducted audits for the purposes of:

- (a) Auditing Demand Reduction Values or determining the Audited Demand Reduction for a Demand Resource:
- (b) Verifying the Commercial Operation of a Demand Resource; and
- (c) -Verifying the Demand Reduction Value or the Audited Demand Reduction of the Demand Resource when the ISO, based on objective criteria, has determined that the Demand Reduction Value or the Audited Demand Reduction of a Demand Resource may not be credible.

New Demand Response Asset Audits shall be performed pursuant to Section III.13.6.1.5.4.8.

# III.13.6.1.5.4.1. General Auditing Requirements for Demand Resources Excluding Demand Response Capacity Resources.

(a) Audits of a Demand Resource will be conducted by simultaneously evaluating the performance of each demand asset that is mapped to that Demand Resource.

- (b) The results of an audit shall be adjusted to reflect any changes in the composition of the Demand Resource resulting from the unmapping of a demand asset from the resource subsequent to the performance of the audit.
- (c) An audit of a Real-Time Emergency Generation Resource must be performed simultaneously with the audit of any Real-Time Demand Response Resources containing Real-Time Demand Response Assets that are located behind the same end-use customer meter as the Real-Time Emergency Generation Assets mapped to the Real-Time Emergency Generation Resource.
- (d) An audit is valid beginning with the month in which the audit is performed, and remains valid until the next audit is performed for a like season, which shall be no later than the end of the next like seasonal DR Auditing Period. Additional audits performed in a month shall not replace the results of the initial audit conducted in a month and are valid on the first of the subsequent month following the audit. Audit results shall not replace a Demand Reduction Value that is based on Demand Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours.
- (e) If one or more demand assets of a Demand Resource do not have audit results at the time the Demand Resource is audited and the audit was conducted in a summer DR Auditing Period or a winter DR Auditing Period, then the contribution of those demand assets toward the audit value of the Demand Resource shall be effective starting with the later of: (i) the start of the DR Auditing Period, or (ii) the 1<sup>st</sup> of the month prior to the month of the audit provided the demand asset was available for dispatch by the ISO in that prior month, and if the demand asset was not available for dispatch in that prior month, then the 1<sup>st</sup> of the month in which the demand asset was available for dispatch.

## III.13.6.1.5.4.2. General Auditing Requirements for Demand Response Capacity Resources.

- (a) Audits of Demand Response Resources associated with a Demand Response Capacity Resource will be conducted by simultaneously evaluating the performance of each Demand Response Asset and Net Supply Generator Asset that is mapped to each associated Demand Response Resource.
- (b) The results of an audit shall be adjusted to reflect any changes in the composition of the Demand Response Resource resulting from the unmapping of a Demand Response Asset and Net Supply

<u>Generator Asset</u> from the Demand Response Resource subsequent to the performance of the audit.

- (c) An audit of a Real-Time Emergency Generation Resource must be performed simultaneously with the audit of any Demand Response Resources containing Demand Response Assets that are located behind the same Retail Delivery Point as the Real-Time Emergency Generation Assets mapped to the Real-Time Emergency Generation Resource. When the output of the Real-Time Emergency Generation Asset is greater than the Demand Response Baseline, adjusted pursuant to Section 8B.5, of the Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the Net Supply is reduced by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset.
- (d) An audit is valid beginning with the date on which the audit is performed, and remains valid until the next audit is performed for a like season, which shall be no later than the end of the next like Seasonal DR Audit period. For the Capacity Commitment Period commencing on June 1, 2017, the audit results for Demand Response Resources comprised of Demand Response Assets and associated Net Supply Generator Assets that were associated with a Real-Time Demand Response Resource in the prior Capacity Commitment Period shall be the sum of the audit results for those assets in the prior like Seasonal DR Audit period. When using audit results from a period prior to June 1, 2017 for those former Real-Time Demand Response Assets, the Audited Full Reduction Time shall be 30 minutes.
- (e) If one or more Demand Response Assets of a Demand Response Resource or associated Net

  Supply Generator Assets do not have an Audited Demand Reduction at the time the Demand
  Response Resource is audited and the audit was conducted in a summer DR Auditing Period or a
  winter DR Auditing Period, then the contribution of those Demand Response Assets or associated

  Net Supply Generator Assets toward the Audited Demand Reduction of the Demand Response
  Resource shall be effective starting with the later of: (i) the start of the DR Auditing Period, or
  (ii) the 1<sup>st</sup> of the month prior to the month of the audit, provided the Demand Response Asset or
  associated Net Supply Generator Asset was available for dispatch by the ISO in that prior month,
  and if the Demand Response Asset or associated Net Supply Generator Asset was not available
  for dispatch in that prior month, then the 1<sup>st</sup> of the month in which the demand asset Demand
  Response Asset or associated Net Supply Generator Asset was available for dispatch.

#### **III.13.6.1.5.4.3. Seasonal DR Audits.**

A Seasonal DR Audit must be conducted for each Demand Resource during each seasonal DR Auditing Period.

### III.13.6.1.5.4.3.1. Seasonal DR Audit Requirement.

A Market Participant shall submit each Demand Resource to an ISO initiated audit each season to verify the Demand Reduction Value or Audited Demand Reduction for the resource for one or more months of the season. The Seasonal DR Audit must be requested by the Market Participant for the Demand Resource within each Capacity Commitment Period in which the Demand Resource has a Capacity Supply Obligation. The summer DR Auditing Period begins on June 1 and ends on August 31. The winter DR Auditing Period begins on December 1 and ends on January 31. For all Demand Resources other than Demand Response Capacity Resources, audits performed during the summer DR Auditing Period will be used to establish the audit results for the months of June, July, and August, and audits performed during the winter DR Auditing Period will be used to establish the audit results for the months of December and January. For Demand Response Capacity Resources, audits performed during the summer DR Auditing Period will be used to establish the Audited Demand Reduction for the Demand Resource summer months of June, July, August, September, October, November, and the following April and May, and audits performed during the winter DR Auditing Period will be used to establish the Audited Demand Reduction for the Demand Resource winter months of December and the following January, February and March.

# III.13.6.1.5.4.3.2. Failure to Request or Perform an Audit.

If by the 1<sup>st</sup> of August for the summer DR Auditing Period or by the 1<sup>st</sup> of January for the winter DR Auditing Period a Market Participant has not requested a Seasonal DR Audit for a Demand Resource, the Market Participant shall be deemed to have requested a Seasonal DR Audit on those respective dates. A Demand Resource that does not successfully perform a Seasonal DR Audit for a DR Auditing Period shall have the audit results of its mapped demand assets or Demand Response Assets set to zero.

# III.13.6.1.5.4.3.3. Use of Event Performance Data to Satisfy Audit Requirements for Certain Resources.

A Real-Time Demand Response Resource or Real-Time Emergency Generation Resource that has received a Dispatch Instruction in a season for 100% of its highest CSO for the current DR Auditing Period lasting at least one hour, not including the 30 minute notification time, may use the first 60 minute

period of the event after the 30 minute notification time to satisfy the Seasonal DR Audit requirement for the applicable DR Auditing Period, subject to the provisions of Section III.13.6.1.5.4.1(c). A Real-Time Demand Response Resource or Real-Time Emergency Generation Resource's audit value under this provision is based on the average load reduction or output demonstrated over the duration of the qualifying 60 minute period.

A Market Participant must request that an event be used to satisfy the Demand Resource's Seasonal DR Audit requirement or replace a currently effective audit result within seven days of the Operating Day on which the Dispatch Instruction for the Real-Time Demand Response Resource or Real-Time Emergency Generation Resource is received.

## III.13.6.1.5.4.3.3.1. Demand Response Capacity Resources.

A Demand Response Capacity Resource may elect to use performance associated with a Shortage Event as defined in Section III.13.7.1.1.1 or a time period when the ISO has declared a capacity deficiency pursuant to ISO New England Operating Procedure No. 4 that occurs during a DR Auditing Period in place of requesting a Seasonal DR Audit.

If a Demand Response Resource associated with a Demand Response Capacity Resource does not reduce demand for some portion of the event, the audit results of its mapped-Demand Response Assets and associated Net Supply Generator Assets shall be set to zero. Otherwise, the Demand Response Resources associated with a Demand Response Capacity Resource will be measured based upon their offered parameters per Section III.13.6.1.5.4.6(d), and the Audited Demand Reduction for each Demand Response Resource will be capped at the average Desired Dispatch Instruction-Point (for the Demand Response Resource and its associated Net Supply Generator Assets) over the audit duration by proportionally reducing each associated Demand Response Asset's and Net Supply Generator Asset's audit results.

All Demand Response Resources associated with a Demand Response Capacity Resource would be measured based upon their offered parameters per Section III.13.6.1.5.4.6(d) where Demand Response Resource not reducing demand for some portion of the event would have the audit results of its mapped Demand Response Assets set to zero. The Audited Demand Reduction for each Demand Response Resource would be capped at the average Dispatch Instruction over the audit duration by proportionally reducing each associated Demand Response Asset audit results.

Within 7 calendar days of the event, the participant must inform the ISO that it wishes to use dispatch performance during the event to establish the resource's Audited Demand Reduction.

## III.13.6.1.5.4.4. Demand Resource Commercial Operation Audit.

- (a) A Market Participant with a Demand Resource that has one or more increments that have not demonstrated commercial operation prior to the commencement of a Capacity Commitment Period shall perform a Demand Resource Commercial Operation Audit. The results of the Demand Resource Commercial Operation Audit shall be used to verify the commercial capacity of the Demand Resource and establish the Audited Demand Reduction of a Demand Response Resource.
- (b) Demand Resource Commercial Operation Audits not performed prior to the commencement of the Capacity Commitment Period must be requested in time for performance within the first month in which the Demand Resource has a Capacity Supply Obligation in the Capacity Commitment Period or the Commercial Operation Date, whichever is earlier. A Demand Resource that does not successfully perform a Demand Resource Commercial Operation Audit shall have the audit results of its mapped demand assets or Demand Response Assets set to zero.
- (c) A Demand Resource that fails to demonstrate through its Demand Resource Commercial Operation Audit a demand reduction in the amount of its Capacity Supply Obligation shall be subject to the provisions of Section III.13.1.9 and Section III.13.3.4.
- (d) A Demand Resource Commercial Operation Audit performed during a summer DR Auditing Period or winter DR Auditing Period may be used to satisfy the Seasonal DR Audit requirement for the same seasonal period. If a Demand Resource conducts a Demand Resource Commercial Operation Audit outside of a summer DR Auditing Period or winter DR Auditing Period, the Seasonal DR Audit requirement shall not be satisfied, however the results shall be used in the calculation of the summer Seasonal DR Audit value or winter Seasonal DR Audit value as follows:
  - (1) A Demand Resource Commercial Operation Audit conducted in the months of September, October, November, April, or May shall be considered a summer Seasonal DR Audit;
  - (2) A Demand Resource Commercial Operation Audit conducted in February or March shall be considered a winter Seasonal DR Audit.

#### III.13.6.1.5.4.5. Additional Audits.

The ISO may initiate an audit to verify the Demand Reduction Value or Audited Demand Reduction of a Demand Resource when an evaluation based on objective criteria indicates a Market Participant is claiming demand reductions in excess of the Demand Resource's actual capability. Such criteria include, but are not limited to:

- (a) A pattern of submitting to the ISO a level of available interruption that is less than the resource's Demand Reduction Value or Audited Demand Reduction during the same time period;
- (b) Actual loads for the underlying assets of the resource that, when aggregated, are below the resource's Demand Reduction Value or Audited Demand Reduction; or
- (c) Failure to achieve the dispatched interruption.

The results of an additional audit shall replace the results of the last like Seasonal DR Audit or Demand Resource Commercial Operation Audit.

The ISO may perform additional audits for a Demand Resource to establish the audit results or Audited Demand Reduction and the performance of the installed measures of the demand asset or Demand Response Asset and associated Net Supply Generator Asset. This additional auditing may consist of two levels.

- (a) Level 1 Audit: the ISO will establish the audit results by conducting a review of records of the demand asset or Demand Response Asset and associated Net Supply Generator Asset to verify that the reported measures have been installed and are operational. The audit shall include, but is not limited to, reviewing project or program databases, invoices, installation reports, work orders, and field inspection reports. In addition, the audit may involve reviewing any independent inspections or evaluations conducted as part of program implementation and program evaluation.
- (b) Level 2 Audit: the ISO shall establish the audit results by initiating or conducting an on-site field audit to verify the installation and performance of measures in the demand asset or Demand Response Asset and associated Net Supply Generator Asset. Such an audit may include a random or select sample of facilities and measures.

A level 1 audit is not required to precede a level 2 audit. If the results of the audit indicate that the demand reduction capability of the Demand Resource is less than or greater than its Demand Reduction Value or Audited Demand Reduction in the same period, then the Demand Reduction Value or Audited Demand Reduction shall be adjusted to the value demonstrated through the audit.

### III.13.6.1.5.4.6. Audit Methodologies.

- (a) For On-Peak Demand Resources, audit results shall be established based on the Average Hourly Output or Average Hourly Load Reduction in the DR Auditing Period.
- (b) For Seasonal Peak Demand Resources, audit results shall be established based on Average Hourly Output or Average Hourly Load Reduction or their equivalent in the DR Auditing Period.
- (c) For Real-Time Demand Response Resources and Real-Time Emergency Generation Resources, audits will be conducted via a Dispatch Instruction sent by the ISO. Audit results for a Real-Time Demand Response Resource and Real-Time Emergency Generation Resource will be based on the sum of the average load reductions or average incremental output demonstrated during the audit by each demand asset mapped to the Demand Resource.
- (d) For Demand Response Capacity Resources, audits will be conducted via a Dispatch Instruction sent by the ISO. Audit results for a Demand Response Capacity Resource will be based on the sum of the average load reductions or average incremental output Net Supply demonstrated during the audit by each Demand Response Asset and associated Net Supply Generator Asset associated with the Demand Response Resource that is mapped to the Demand Response Capacity Resource using (i) each Demand Response Resource's Offered Full Reduction Time to establish the start of the audit period and (ii) the Minimum Reduction Time adjusted for ramping time as the audit duration. The Offered Full Reduction Time is the Demand Response Resource Notification Time plus the Demand Response Resource Start-Up Time plus ((the Maximum Reduction plus the sum of the Economic Maximum Limits of any associated available Net Supply Generator Assets minus the Minimum Reduction) divided by the Demand Response Resource Ramp Rate). For purposes of determing the Offered Full Reduction Time, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5, of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the Economic Maximum Limit of the Net Supply Generator Asset is reduced by the

difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset.

## III.13.6.1.5.4.7. Requesting and Performing an Audit.

- (a) Seasonal DR Audits and Demand Resource Commercial Operation Audits will be performed following the request of the Market Participant. Audits will be performed within 20 Business Days of the date requested by the Market Participant. The date and time of the audit will be unannounced. An audit request may be denied by the ISO, and an audit may be rescheduled, if its performance will jeopardize the reliable operation of the electrical system.
- (b) Seasonal DR Audits may be performed on different dates and at different times for Demand Response Resources associated with a Demand Response Capacity Resource if the Demand Response Resources have different offer parameters. In addition, the ISO will only schedule Demand Resource Commercial Operation Audits of a Demand Response Resource with Demand Response Assets that do not have an Audited Demand Reduction value.
- (c) New Demand Response Asset Audits will be performed following the request of the Market Participant. The request for a New Demand Response Asset Audit by the Market Participant shall be made during the last seven days of the month. The audit will be performed on Business Days during the month following the date of the request by the Market Participant. The date and time of the audit will be unannounced. An audit request may be denied by the ISO, and an audit may be rescheduled, if its performance will jeopardize the reliable operation of the electrical system.

#### III.13.6.1.5.4.8. New Demand Response Asset Audits

A Market Participant may request a New Demand Response Asset Audit for all New Demand Response Assets that are mapped to a Demand Resource. The results of a New Demand Response Asset Audit may be used:

- (a) In calculating the Seasonal DR Audit value for the Demand Resource to which the asset is mapped until the next Seasonal DR Audit for the full Demand Resource is conducted;
- (b) For determination regarding termination under Section III.13.3.4(c); and

(c) In the monthly calculation of a Demand Resource's Demand Reduction Value pursuant to Section III.13.7.1.5.7 and Section III.13.7.1.5.8.

## III.13.6.1.5.4.8.1. General Auditing Requirements for New Demand Response Assets.

- (a) A New Demand Response Asset Audit will be conducted by simultaneously evaluating the performance of each New Demand Response Asset that is mapped to that Demand Resource.
- (b) A New Demand Response Asset Audit is valid beginning with the month in which the audit is performed, and remains valid until the next Seasonal DR Audit is performed for a like season. Additional audits performed in a month shall not replace the results of the initial audit conducted in a month and are valid on the first of the month following the audit. Audit results shall not be used in the calculation of a Demand Reduction Value that is based on Demand Response Event Hours, or Real-Time Emergency Generation Event Hours.

## III.13.6.1.5.5. Reporting of Forecast Hourly Demand Reduction.

A Market Participant with Critical Peak Demand Resources, Real-Time Demand Response Resources, or Real-Time Emergency Generation Resources shall, in accordance with the ISO New England Manuals and Operating Procedures, submit to the ISO a two-day forecast of each Demand Resource's Forecast Hourly Demand Reduction for each Operating Day. The Market Participant shall update its forecast, in accordance with the ISO New England Manuals and Operating Procedures, to reflect its estimate of each Demand Resource's Forecast Hourly Demand Reduction.

## III.13.6.1.5.6. Reporting of Monthly Maximum Forecast Hourly Demand Reduction.

A Market Participant with Critical Peak Demand Resources, Real-Time Demand Response Resources, or Real-Time Emergency Generation Resources shall, in accordance with the ISO New England Manuals and Operating Procedures, submit to the ISO each month a forecast of each resource's monthly maximum Forecast Hourly Demand Reduction for each of the next 12 months.

## III.13.6.2. Resources without a Capacity Supply Obligation.

A resource that does not have any Capacity Supply Obligation shall comply with the requirements in this Section III.13.6.2, and shall not be subject to the requirements set forth in Section III.13.6.1 during the

Capacity Commitment Period, or portion thereof, for which the resource has no Capacity Supply Obligation.

## III.13.6.2.1. Generating Capacity Resources.

### III.13.6.2.1.1. Energy Market Offer Requirements.

A Generating Capacity Resource having no Capacity Supply Obligation is not required to offer into the Day-Ahead Energy Market or Real-Time Energy Market.

## III.13.6.2.1.1.1. Day-Ahead Energy Market Participation.

A Generating Capacity Resource having no Capacity Supply Obligation may submit an offer into the Day-Ahead Energy Market. If any portion of the offered energy clears in the Day-Ahead Energy Market, the entire Supply Offer, up to the Economic Maximum Limit offered into the Day-Ahead Energy Market, will be subject to all of the rules and requirements applicable to that market for the operating day, including the obligation to follow ISO dispatch instructions. Such a resource that clears shall be eligible for dispatch in the Real-Time Energy Market.

# III.13.6.2.1.1.2. Real-Time Energy Market Participation.

A Generating Capacity Resource having no Capacity Supply Obligation that did not submit an offer into the Day-Ahead Energy Market or was offered into the Day-Ahead Energy Market and did not clear, must Self-Schedule in order to participate in the Real-Time Energy Market and shall be subject to all of the requirements associated therewith. Such a resource shall be eligible for dispatch in the Real-Time Energy Market.

# III.13.6.2.1.2. Additional Requirements for Generating Capacity Resources Having No Capacity Supply Obligation.

Generating Capacity Resources having no Capacity Supply Obligation are subject to the following additional requirements:

- (a) complying with the auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) complying with the Operating Data collection requirements detailed in the ISO New England Manuals; and

(c) complying with outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals. Generating Capacity Resources having no Capacity Supply Obligation are not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

## III.13.6.2.2. [Reserved.]

## III.13.6.2.3. Intermittent Power Resources.

## III.13.6.2.3.1. Energy Market Offer Requirements.

An Intermittent Power Resource having no Capacity Supply Obligation is not required to offer into the Day-Ahead Energy Market or Real-Time Energy Market.

## III.13.6.2.3.2. Additional Requirements for Intermittent Power Resources.

Intermittent Power Resources are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals; and
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals.

# III.13.6.2.4. Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources.

## III.13.6.2.4.1. Energy Market Offer Requirements.

A Settlement Only Resource may not submit an offer into the Day-Ahead Energy Market or the Real-Time Energy Market.

## III.13.6.2.4.2. Additional Requirements for Settlement Only Resources.

Settlement Only Resources are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals;

(c) such resources are not subject to outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals.

## III.13.6.2.5. Demand Resources.

## III.13.6.2.5.1. Energy Market Offer Requirements.

Real-Time Emergency Generation Resources, Critical Peak, Seasonal Peak and On-Peak Demand Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Market. A Real-Time Demand Response Asset associated with a Real-Time Demand Response Resource may submit Demand Reduction Offers on a Day-Ahead and Real-Time basis pursuant to Appendix E. A Demand Response Capacity Resource and associated Net Supply Generator Assets, without a Capacity Supply Obligation is not required to offer into the Day-Ahead Energy Market or Real-Time Energy Market.

For Demand Reduction Offers made into the Day-Ahead Energy Market and Real-Time Energy Market from such Demand Response Resources, the sum of the Demand Response Resource's Minimum Reduction Time plus the Minimum Time Between Reductions must also be less than or equal to 24 hours.

For Supply Offers made into the Day-Ahead Energy Market and Real-Time Energy Market from such Net Supply Generator Assets, the sum of the Minimum Run Time plus the Minimum Down Time must also be less than or equal to 24 hours.

## III.13.6.2.5.1.1. Day-Ahead Energy Market Participation.

A Demand Response Resource not associated with a Demand Response Capacity Resource or a Demand Response Resource associated with a Demand Response Capacity Resource without a Capacity Supply Obligation, may submit a Demand Reduction Offer or, for any associated Net Supply Generator Asset, a Supply Offer, into the Day-Ahead Energy Market. If any portion of the Demand Reduction Offer or Supply Offer clears in the Day-Ahead Energy Market, the entire Demand Reduction Offer or Supply Offer, up to the Maximum Reduction or Economic Maximum Limit offered into the Day-Ahead Energy Market, will be subject to all of the rules and requirements applicable to that market for the Operating Day, including the obligation to follow Dispatch Instructions. Such a resource that clears shall be eligible for dispatch in the Real-Time Energy Market.

## III.13.6.2.5.1.2. Real-Time Energy Market Participation.

A Demand Response Resource not associated with a Demand Response Capacity Resource or a Demand Response Resource associated with a Demand Response Capacity Resource without a Capacity Supply Obligation, that did not submit an offer into the Day-Ahead Energy Market or was offered into the Day-Ahead Energy Market and did not clear, may submit a Demand Reduction Offer or, for any associated Net Supply Generator Assets, a Supply Offer, in the Real-Time Energy Market and shall be subject to all of the requirements associated therewith. Such a resource shall be eligible for dispatch in the Real-Time Energy Market.

# III.13.6.2.5.2. Additional Requirements for Demand Response Capacity Resources Having No Capacity Supply Obligation.

Demand Response Capacity Resources without a Capacity Supply Obligation are subject to the following additional requirements:

- (a) complying with the auditing and rating requirements as detailed in Section III.13.6.1.5.4 and the ISO New England Manuals;
- (b) complying with the Operating Data collection requirements detailed in the ISO New England Manuals; and
- (c) complying with outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals. Demand Response Capacity Resources having no Capacity Supply Obligation are not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

## III.13.6.3. Exporting Resources.

A resource that is exporting capacity not subject to a Capacity Supply Obligation to an external Control Area shall comply with this Section III.13.6.3 and the ISO New England Manuals. Intermittent Power Resources, Settlement Only Resources, and Demand Resources are not permitted to back a capacity export to an external Control Area. The portion of a resource without a Capacity Supply Obligation that will be used in Real-Time to support an External Transaction sale must comply with the energy market offer requirements of Section III.1.10.7.

## III.13.6.4. ISO Requests for Energy.

The ISO may request that a Demand Response Capacity Resource or Generating Capacity Resource having capacity that is not subject to a Capacity Supply Obligation provide energy for reliability purposes in the Real-Time Energy Market, but such resource shall not be obligated under Section III.13 of this Tariff by such a request to provide energy from that capacity, and shall not be subject to any availability penalties under Section III.13 of this Tariff by such a request for failure to provide energy from that capacity that is not subject to a Capacity Supply Obligation. If such resource does provide energy from that capacity, the resource shall be paid based on its most recent offer and is eligible for NCPC.

## III.13.6.4.1. Real-Time High Operating Limit.

For purposes of facilitating ISO requests for energy under Section III.13.6.4, a Market Participant must report an up-to-date Real-Time High Operating Limit value at all times for a Generating Capacity Resource.

### III.13.7. Performance, Payments and Charges in the FCM.

During each month within each Capacity Commitment Period ("Obligation Month"), each resource that acquired or shed a Capacity Supply Obligation for that Capacity Commitment Period (or any portion thereof) will be subject to payments, charges, penalties and adjustments for such activity. In addition, all resources with a Capacity Supply Obligation as of the beginning of the Obligation Month shall have their performance measured throughout the month, based on the resource's availability during any Shortage Events in the Obligation Month.

In the event of a change in the Lead Market Participant for a resource that has a Capacity Supply Obligation, the Capacity Supply Obligation shall remain associated with the resource and the new Lead Market Participant for the resource shall be bound by all provisions of this Section III.13 arising from such Capacity Supply Obligation. The Lead Market Participant for the resource at the start of an Obligation Month shall be responsible for all payments and charges associated with that resource in that Obligation Month.

#### III.13.7.1. Performance Measures.

## III.13.7.1.1. Generating Capacity Resources.

During each Capacity Commitment Period, each Generating Capacity Resource having a Capacity Supply Obligation for that Capacity Commitment Period (or any portion thereof) will have its performance measured during each Obligation Month based on the resource's availability during any Shortage Events during the month.

## III.13.7.1.1.1. Definition of Shortage Events.

- (a) A Shortage Event is any period of thirty or more contiguous minutes of system-wide Reserve Constraint Penalty Factor activation, defined as being short of operating reserves.
- (b) In an import-constrained Capacity Zone, as determined pursuant to Section III.13.2.3.4, a Shortage Event shall also be any OP4 Action 6, OP4 Action 12, OP4 Action 13, or OP7 event, or their successor operating procedures, that is declared based on adequacy and not security, as defined in the ISO New England Manuals, with a duration of thirty or more contiguous minutes, and that is not also declared outside of the Capacity Zone.

- (c) An export-constrained Capacity Zone, as determined pursuant to Section III.13.2.3.4, shall be exempt from a Shortage Event if an OP4 Action 6, OP4 Action 11, OP4 Action 12, OP4 Action 13, or OP7 event has been declared for the Rest-of-Pool Capacity Zone but not for that export-constrained Capacity Zone.
- (d) In all cases, to be considered discrete Shortage Events, such events must be separated by at least 2.5 hours. Events that would satisfy the definition of Shortage Events except that they are separated by less than 2.5 hours shall be considered a single Shortage Event with a duration equal to the sum of the lengths of the underlying events. There shall be no more than two Shortage Events per Capacity Zone per day. If there are more than two Shortage Events in a day, only the first two Shortage Events that occur will be recognized.
- (e) For the purposes of Section III.13.7.1.1.1(d), Shortage Events that cross daily boundaries will be considered to occur on the day in which the Shortage Event was triggered. Availability during Shortage Events that cross monthly boundaries will be applied to the Obligation Month in which the Shortage Event was triggered.

# III.13.7.1.1.1.A Shortage Event Availability Score.

For each Shortage Event, the ISO shall calculate a Shortage Event Availability Score for each resource, as follows: For each hour containing any portion of the Shortage Event, the ISO shall multiply the resource's hourly availability score by the number of minutes of the Shortage Event in that hour, and then divide the product by the total number of minutes in the Shortage Event. The resulting values for each hour shall then be added together to determine the resource's Shortage Event Availability Score.

## III.13.7.1.1.2. Hourly Availability Scores.

The ISO shall calculate an availability score for each resource for each hour that contains any portion of a Shortage Event. A resource's availability score for an hour, expressed as a percentage which may not exceed 100 percent, shall be the sum of the resource's available MW in that hour plus any adjustments pursuant to Section III.13.7.1.1.4 divided by the resource's Capacity Supply Obligation. In the event that there are no Shortage Event hours during a month, no availability penalties will be assessed.

## III.13.7.1.1.3. Hourly Available MW.

A resource's available MW in each hour that contains any portion of a Shortage Event shall be determined pursuant to the provisions of this Section III.13.7.1.1.3, provided, however, that in no case

shall a resource's available MW in an hour exceed that resource's CNR Capability (reduced by the hourly integrated delivered MW for any External Transaction sale or sales from that resource).

- (a) For a resource that is on-line with a metered output greater than zero and following ISO dispatch instructions, the available MW in an hour shall be the resource's Economic Maximum Limit, as submitted or redeclared by the Lead Market Participant.
- (b) For a resource that is off-line with a metered output equal to zero and available for dispatch and following ISO dispatch instructions and has a cold notification time plus cold start time of thirty minutes or less, the available MW in an hour shall be the resource's Economic Maximum Limit, as submitted or redeclared by the Lead Market Participant.
- (c) For a resource that is off-line with a metered output equal to zero and available for dispatch and following ISO dispatch instructions and has a cold notification plus cold start-up time of less than or equal to 12 hours (16 hours, during the first five Capacity Commitment Periods for resources with notification plus start-up times greater than 12 hours as of June 16, 2006) and the output, up to the Capacity Supply Obligation, was competitively offered into the Energy Market (i.e., capacity from the listed portion of the resource was offered at or below the appropriate Reference Level plus applicable conduct thresholds) but was not committed by the ISO and was consequently unavailable within 30 minutes, the available MW in an hour shall be the resource's Economic Maximum Limit, as submitted or redeclared by the Lead Market Participant.
- (d) For a resource that is off-line but not meeting the requirements of either Section III.13.7.1.1.3(b) or Section III.13.7.1.1.3(c), the available MW in an hour shall be zero.
- (e) For a resource that is on-line but not able to follow ISO dispatch instructions, the available MW in an hour shall be the resource's metered output for the hour.
- (f) Where a resource is not committed due to an outage or derate of transmission equipment within the New England Control Area, other than an outage or de-rate of transmission equipment that is controlled by the owner of the resource or that constitutes a radial lead to a resource in the New England Control Area (other than radial leads to Wyman 4 and Stony Brook), that resource's available MW in an hour shall not be reduced as result. Maine Independence Station shall be considered available when derated or not committed because of a transmission constraint.

- (g) Where a resource is denied a self-schedule request by the ISO and therefore was not available in the Real-Time Energy Market, that resource's available MW in an hour shall not be reduced as a result.
- (h) Where a New Generating Capacity Resource that has cleared in the Forward Capacity Auction has completed construction but due to a planned transmission facility (e.g., a radial interconnection) not being in service is not able to achieve Commercial Operation and cannot conduct its capability audit by the first day of the Obligation Month, that resource's available MW in an hour shall not be reduced as a result (i.e., the resource shall not be subject to an availability penalty as a result).
- (i) Where a New Generating Capacity Resource that has cleared in the Forward Capacity Auction has completed construction but due to a planned transmission facility (e.g., a radial interconnection) not being in service is not able to achieve Commercial Operation, and is able to conduct a capability audit, that resource's available MW in an hour shall not be reduced as a result (i.e., the resource shall not be subject to an availability penalty as a result).
- (j) Where a resource is associated with one or more External Transaction sales submitted in accordance with Section III.1.10.7(f), that resource will have its hourly available MW reduced by the hourly integrated delivered MW for the External Transaction sale or sales.

## III.13.7.1.1.4. Availability Adjustments.

- (a) A resource's hourly availability score may be increased using a Supplemental Availability Bilateral as described in Section III.13.5.3. Where all of the requirements of Section III.13.5.3 are met, the amount of available MW from the Supplemented Capacity Resource during each hour of the Shortage Event will be increased by the amount of supplemental capacity specified in the Supplemental Availability Bilateral, provided, however, that only available capacity above the Supplemental Capacity Resource's Capacity Supply Obligation, if any, during each hour of the Shortage Event may be counted as supplemental capacity for the Supplemented Capacity Resource. The sum of these amounts will be counted in determining the availability score of the Supplemented Availability Resource for the Shortage Event.
- (b) A resource's hourly availability score may be increased when an asset associated with the resource is on a planned outage that was approved in the ISO's annual maintenance scheduling process.

Market Participants may indicate when submitting a planned outage request that the outage is to be considered exempt as described in ISO New England Operating Procedure No. 5. In such cases the associated resource's hourly available MWs may be increased by an amount up to the outage MWs requested, provided that the resource has not exceeded the maintenance allotment hour limit regarding exempt approved planned outages at the time of the Shortage Event as described in the ISO New England Manuals. In the case of a Settlement Only Resource, a planned outage scheduled in either December or January or during the period June 1 through September 15 may not be used to increase the resource's hourly availability score as described in this subsection.

### III.13.7.1.1.5. Poorly Performing Resources.

Prior to the Forward Capacity Auction qualification process, the ISO shall determine whether a resource meets the following two criteria: in the most recent four consecutive Capacity Commitment Periods or the most recent 4 years in which the resource assumed a Capacity Supply Obligation: (a) the resource received 3 annual availability scores of less than or equal to 40 percent; and (b) the resource has failed to be available in its entirety during ten or more Shortage Events during that same period. The annual availability score for each Capacity Commitment Period shall be equal to the average of all availability scores as calculated for each hour during each Shortage Event. If both of these criteria are met, the resource shall be considered a Poorly Performing Resource and shall not be eligible to participate in any subsequent Forward Capacity Auctions, and may not assume an obligation through the reconfiguration auctions, or Capacity Supply Obligation Bilaterals until it either achieves an availability score of 60 percent or higher in three consecutive Capacity Commitment Periods or 3 consecutive years, or demonstrates to the ISO that the reasons for the inadequate availability scores have been remedied. For the purposes of determining whether a resource is a Poorly Performing Resource, its availability score while it is de-listed shall not be considered. For the purposes of returning from poorly performing status, the ISO, at the request of the resource owner, may consider performance while de-listed, but in no case shall the ISO use non-consecutive years for evaluating a resource's performance.

## III.13.7.1.2. Import Capacity.

The performance of an Import Capacity Resource with a Capacity Supply Obligation will be measured during Shortage Events as defined in Section III.13.7.1.1.1. An Import Capacity Resource's Shortage Event Availability Score and hourly availability score shall be calculated in the manner described in Section III.13.7.1.1.1.A and III.13.7.1.1.2, respectively (with the hourly availability score adjusted pursuant to Section III.13.7.1.2.1, as appropriate). An Import Capacity Resource's available MW in each hour that contains any portion of a Shortage Event shall be determined as follows:

- (a) Where the corresponding External Transactions are delivering energy in accordance with ISO dispatch instructions, the resource's available MW in the hour shall be equal to the MW associated with the External Transactions, as submitted by the Market Participant.
- (b) Where the corresponding External Transactions have been offered in accordance with the provisions of Section III.13.6.1.2 and is not delivering energy during the hour because the ISO has not requested dispatch of the transaction, the resource's available MW in the hour shall be equal to the MW associated with the External Transactions, as submitted by the Market Participant.
- (c) Where the corresponding External Transactions have not been offered in accordance with the provisions of Section III.13.6.1.2 or have been offered in accordance with the provisions of Section III.13.6.1.2 and are not delivering energy during the hour despite ISO requested dispatch of the transaction, the resource's available MW in the hour shall be zero.
- (d) Where the Import Capacity Resource was offered in accordance with the provisions of Section III.13.6.1.2 but cannot make Real-Time deliveries of energy because the relevant external interface is already flowing at its Total Transfer Capability into New England in Real-Time, the resource's available MW in the hour shall be equal to the MW associated with the External Transactions, as submitted by the Market Participant.

## III.13.7.1.2.1. Availability Adjustments.

The hourly availability score of an Import Capacity Resource that qualified as being backed by a single External Resource may be increased when the associated External Resource is on a planned outage in the same manner as described in Section III.13.7.1.1.4(b).

## III.13.7.1.3. Intermittent Power Resources.

The performance measure for Intermittent Power Resources, including Intermittent Settlement Only Resources will be included in the determination of their summer and winter Qualified Capacity as described in Section III.13.1.1.2.2.6 and Section III.13.1.2.2.2.

# III.13.7.1.4. Settlement Only Resources.

## III.13.7.1.4.1. Non-Intermittent Settlement Only Resources.

A Non-Intermittent Settlement Only Resource's Shortage Event Availability Score and hourly availability score shall be calculated in the manner described in Section III.13.7.1.1.1.A and III.13.7.1.1.2, respectively. Its available MW in an hour of a Shortage Event shall be the resource's metered output for the hour.

### III.13.7.1.4.2. Intermittent Settlement Only Resources.

The performance measure for Intermittent Settlement Only Resources will be included in the determination of their summer and winter Qualified Capacity as described in Section III.13.1.1.2.2.6 and Section III.13.1.2.2.2.

#### III.13.7.1.5. Demand Resources.

## III.13.7.1.5.1. Capacity Values of Demand Resources.

The Capacity Value of a Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast as determined by the ISO for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, multiplied by one plus the percent average avoided peak transmission and distribution losses used by the ISO in its calculations of the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears. Beginning with the Capacity Commitment Period starting June 1, 2012 through May 31, 2017, the Capacity Value of a Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by one plus the percent average avoided peak transmission and distribution losses used to calculate the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears. Beginning with the Capacity Commitment Period starting June 1, 2017, the Capacity Value of a Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by one plus the percent average avoided peak distribution losses used to calculate the Installed Capacity Requirement for the Forward Capacity Auction in which the Demand Resource clears. For the first Forward Capacity Auction, the value of the Installed Capacity Requirement divided by the 50/50 summer system peak load forecast shall be 1.143, and one plus the percent average avoided peak transmission and distribution losses shall be 1.08.

III.13.7.1.5.1.1. Special Provisions for Demand Resources that Cleared in the First through Seventh Forward Capacity Auctions in which Project Sponsor Elected to have its Capacity Supply Obligation and Capacity Clearing Price Apply for Multiple Capacity Commitment Periods.

For a Demand Resource that cleared in the Forward Capacity auction for the Capacity Commitment Period beginning June 1, 2010 in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period beginning June 1, 2010, the Capacity Value of that Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the product of 1.143 and 1.08. For a Demand Resource that cleared in the Forward Capacity Auction for the Capacity Commitment Period beginning June 1, 2011 in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period beginning June 1, 2011, the Capacity Value of that Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the product of 1.161 and 1.08. For a Demand Resource that cleared in the Forward Capacity Auction for any of the Capacity Commitment Periods beginning June 1, 2012 through the Capacity Commitment Period beginning in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply in a future Capacity Commitment Period, the Capacity Value of that Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the product of 1.08. This special provision shall cease to apply once the period elected by the Project Sponsor to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its Demand Resource offer cleared has expired.

## III.13.7.1.5.2. Capacity Values of Certain Distributed Generation.

For those Distributed Generation resource assets that are capable of generating energy in excess of the facility load and capable of delivering the excess generation to the power grid, if across Demand Resource On-Peak Hours, Demand Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours, as appropriate, a Distributed Generation resource asset's monthly average hourly output is greater than the monthly average hourly load of the end-use customer to which the resource is directly connected, the Capacity Value of the portion of output exceeding the customer's load for the month will be the Demand Reduction Value for that portion of the output. No average avoided peak transmission and distribution losses shall be applied to Net Supply

associated with a Demand Response Asset, Demand Response Resource, or Demand Response Capacity Resource.

#### III.13.7.1.5.3. Demand Reduction Values.

A Demand Reduction Value is a quantity of reduced demand produced by a Demand Resource and is calculated pursuant to Section III.13.7.1.5.4, III.13.7.1.5.5, III.13.7.1.5.6, III.13.7.1.5.7 and III.13.7.1.5.8.

#### III.13.7.1.5.4. Calculation of Demand Reduction Values for On-Peak Demand Resources.

Monthly Demand Reduction Values shall be established for the months of June, July, August, December, and January and seasonal Demand Reduction Values for the remaining calendar months. The monthly Demand Reduction Value of On-Peak Demand Resources shall be equal to its Average Hourly Load Reduction or Average Hourly Output over Demand Resource On-Peak Hours in the month.

#### III.13.7.1.5.4.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value of On-Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of June, July and August. The summer seasonal Demand Reduction Value shall apply to the months of September, October, November, April and May.

### III.13.7.1.5.4.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value of On-Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of December and January. The winter seasonal Demand Reduction Value shall apply to the months of February and March.

# III.13.7.1.5.5. Calculation of Demand Reduction Values for Seasonal Peak Demand Resources.

Monthly Demand Reduction Values shall be established for the months of June, July, August, December, and January and seasonal Demand Reduction Values for the remaining calendar months. The monthly Demand Reduction Value of Seasonal Peak Demand Resources shall be equal to its Average Hourly Load Reduction or Average Hourly Output over Demand Resource Seasonal Peak Hours in the month. If there are no Demand Resource Seasonal Peak Hours in the months of July, August, or January, the Demand Reduction Value for those months shall be equal to: (i) the Demand Reduction Value established for the previous month if the previous month's Demand Reduction Value was calculated using Seasonal Peak Hours or (ii) the Seasonal DR Audit results if the Demand Reduction Value for the previous month was

not calculated using Seasonal Peak Hours. If there are no Demand Resource Seasonal Peak Hours in the months of June or December, the Demand Reduction Value of that resource for those months shall be equal to (i) the first applicable seasonal audit, if conducted in that month, or (ii) where there was no audit conducted in the month, the applicable previous seasonal Demand Reduction Value.

#### III.13.7.1.5.5.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value of Seasonal Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of June, July and August. This summer seasonal Demand Reduction Value will apply to the months of September, October, November, April and May.

#### III.13.7.1.5.5.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value of Seasonal Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of December and January. This winter seasonal Demand Reduction Value will apply to the months of February and March.

## III.13.7.1.5.6. [Reserved.]

### III.13.7.1.5.6.1. Summer Seasonal Demand Reduction Value. [Reserved.]

The summer seasonal Demand Reduction Value of a Critical Peak Demand Resource for September, October, November, April and May shall be equal to:

- (i) the simple average of its Average Hourly Load Reduction or Average Hourly Output in the most recent months of June, July and August if there are no Demand Resource Critical Peak Hours in the month or
- (ii) the simple average of:
  - (a) the simple average of its Average Hourly Load Reduction or Average Hourly Qutput in the most recent months of June, july and August and
  - (b) its Average Hourly Load Reduction or Average Hourly Output across the Demand Resource
    Critical Peak Hours in the month if there are Demand Resource Critical Peak Hours in the
    month.

# III.13.7.1.5.6.2. Winter Seasonal Demand Reduction Value. [Reserved.]

The winter seasonal Demand Reduction Value of a Critical Peak Demand Resource for February and March shall be equal to:

- (i) the simple average of its Average Hourly Load Reduction or Average Hourly Output in the most recent mothhs of December and January if there are no Demand Resource Critical Peak Hours in the month or
- (ii) the simple average of;
  - (a) the simple average of its Average Hourly Load Reduction or Average Hourly Output in the most recent months of December and January and
  - (b)(a) its Average Hourly Load Reduction or Average Hourly Output across the Demand Resource Critical Peak Hours in the month if there are Demand Resource Critical Peak Hours in the month.

# III.13.7.1.5.7. Demand Reduction Values for Real-Time Demand Response Resources.

Demand Reduction Values are determined on a monthly basis. For the months of June, July, August, December, and January, the Demand Reduction Value of a Real-Time Demand Response Resource is the simple average of its Hourly Calculated Demand Resource Performance Values in the month.

If there are no Real-Time Demand Response Event Hours for a Real-Time Demand Response Resource in the months of July, August, or January, the Demand Reduction Value of that resource for those months shall be equal to (i) the Demand Reduction Value established for the previous month if the previous month's Demand Reduction Value was calculated using Real-Time Demand Response Event Hours or (ii) the sum of the audit values of the assets mapped to the Real-Time Demand Response Resource in that month if the Demand Reduction Value for the previous month was not calculated using Real-Time Demand Response Event Hours. If there are no Real-Time Demand Response Event Hours for a Real-Time Demand Response Resource in the months of June or December the Demand Reduction Value of that resource for those months shall be equal to (i) the first applicable seasonal audit, if conducted in that month, or (ii) the sum of the audit values of the assets mapped to the Real-Time Demand Response Resource in that month.

### III.13.7.1.5.7.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value of a Real-Time Demand Response Resource for September, October, November, April and May shall be equal to (i) the simple average of its Demand Reduction Values in the most recent months of June, July and August if there are no Real-Time Demand Response Event Hours in the month or (ii) the simple average of (a) the simple average of its Demand Reduction Values in the most recent months of June, July and August and (b) its Demand Reduction

Value, established using the method specified in Section III.13.7.1.5.7, across the Real-Time Demand Response Event Hours in the month if there are Real-Time Demand Response Event Hours in the month.

#### III.13.7.1.5.7.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value of a Real-Time Demand Response Resource for February and March shall be equal to (i) the simple average of its Demand Reduction Values in the most recent months of December and January if there are no Real-Time Demand Response Event Hours in the month or (ii) the simple average of (a) the simple average of its Demand Reduction Value in the most recent months of December and January and (b) its Demand Reduction Value, established using the method specified in Section III.13.7.1.5.7, across the Real-Time Demand Response Event Hours in the month if there are Real-Time Demand Response Event Hours in the month.

# III.13.7.1.5.7.3. Determination of Hourly Calculated Demand Resource Performance Values for Real-Time Demand Response Resources.

The Hourly Calculated Demand Resource Performance Value shall be computed for each Real-Time Demand Response Resource receiving a Dispatch Instruction for a Real-Time Demand Response Event Hour. The Hourly Calculated Demand Resource Performance Value shall be computed as (i) the Real-Time Demand Response Resource's Capacity Supply Obligation, divided by (ii) the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast as determined by the ISO for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, divided by (iii) one plus the percent average avoided peak transmission and distribution losses used in the calculation of the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, and multiplied by (iv) one plus the quotient of Hourly Real-Time Demand Response Resource Deviation and the amount of load reduction or output that the Market Participant with the resource was instructed to produce from that resource pursuant to Dispatch Instructions.

# III.13.7.1.5.7.3.1. Determination of the Hourly Real-Time Demand Response Resource Deviation.

An Hourly Real-Time Demand Response Resource Deviation shall be calculated for each Real-Time Demand Response Resource as the difference between the Average Hourly Load Reduction or Average Hourly Output of the Real-Time Demand Response Resource and the amount of load reduction or output that the Market Participant with the resource was instructed in the Dispatch Instruction to produce in the Real-Time Demand Response Event Hour. The calculation of the Hourly Real-Time Demand Response

Resource Deviation shall be determined in a manner that reflects that Real-Time Demand Response Resources are allowed 30 minutes from the beginning of the first Real-Time Demand Response Event Hour in consecutive Real-Time Demand Response Event Hours in a Dispatch Instruction for the same Operating Day to achieve the load reduction amount indicated in the Dispatch Instruction when such resources are dispatched in response to Real-Time Demand Resource Dispatch Hours. The Total Negative Hourly Demand Resource Deviations for each hour shall be calculated as the absolute value of the sum of the negative Hourly Real-Time Demand Response Resource Deviations and negative Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. The Total Positive Hourly Demand Resource Deviations for each hour shall be calculated as the sum of the positive Hourly Real-Time Demand Response Resource Deviations and positive Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. If the Hourly Real-Time Demand Response Resource Deviation is greater than zero in any Real-Time Demand Response Event Hour, the Hourly Real-Time Demand Response Resource Deviation shall be multiplied by the lesser of: (i) one, or; (ii) the ratio of the Total Negative Hourly Demand Resource Deviations divided by the Total Positive Demand Resource Deviations in the same Load Zone in the hour or, starting on June 1, 2011, in the same Dispatch Zone in the hour.

## III.13.7.1.5.8. Demand Reduction Values for Real-Time Emergency Generation Resources.

Demand Reduction Values shall be determined on a monthly basis. For the months of June, July, August, December, and January, the Demand Reduction Value of a Real-Time Emergency Generation Resource shall be the simple average of its Hourly Calculated Demand Resource Performance Values in the month.

If there are no Real-Time Emergency Generation Event Hours for a Real-Time Emergency Generation Resource in the months of July, August, or January, the Demand Reduction Value for those months shall be equal to (i) the Demand Reduction Value established for the previous month if the previous months Demand Reduction Value was calculated using Real-Time Emergency Generation Event Hours or (ii) the sum of the audit values of the assets mapped to the Real-Time Emergency Generation Resource in that month if the Demand Reduction Value for the previous month was not calculated using Real-Time Emergency Generation Event Hours. If there are no Real-Time Emergency Generation Event Hours for a Real-Time Emergency Generation Resource in the months of June or December, the Demand Reduction

Value of that resource for those months shall be equal to (i) the first applicable seasonal audit, if conducted in that month, or (ii) the sum of the audit values of the assets mapped to the Real-Time Emergency Generation Resource in that month.

#### III.13.7.1.5.8.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value for the months of September, October, November, April and May shall be equal to the simple average of the Demand Reduction Values in the most recent months of June, July and August if there are no Real-Time Emergency Generation Event Hours in the month. If there are Real-Time Emergency Generation Event Hours in the months of September, October, November, April or May, the Demand Reduction Value shall be equal to the Demand Reduction Value, established using the method specified in Section III.13.7.1.5.8, during all the Real-Time Emergency Generation Event Hours in the month.

#### III.13.7.1.5.8.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value for the months of February and March shall be equal to the simple average of the Demand Reduction Values in the most recent months of December and January if there are no Real-Time Emergency Generation Event Hours in the month. If there are Real-Time Emergency Generation Event Hours in the months of February or March, the Demand Reduction Value shall be equal to the Demand Reduction Value, established using the method specified in Section III.13.7.1.5.8 during all the Real-Time Emergency Generation Event Hours in the month.

# III.13.7.1.5.8.3. Determination of Hourly Calculated Demand Resource Performance Values for Real-Time Emergency Generation Resources.

The Hourly Calculated Demand Resource Performance Value shall be computed for each Real-Time Emergency Generation Resource receiving a Dispatch Instruction for a Real-Time Emergency Generation Event Hour. The Hourly Calculated Demand Resource Performance Value shall be computed as (i) the Real-Time Emergency Generation Resource's Capacity Supply Obligation, divided by (ii) the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, divided by (iii) prior to June 1, 2017 one plus the percent average avoided peak transmission and distribution losses used in the calculation of the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears or, beginning June 1, 2017, one plus the percent average avoided peak distribution losses used in the calculation of the Installed Capacity Requirement for the Forward Capacity Auction immediately

preceding the Forward Capacity Auction in which the Demand Resource clears, and multiplied by (iv) one plus the quotient of Hourly Real-Time Emergency Generation Resource Deviation and the amount of load reduction or output that the Market Participant with the resource was instructed to produce from that resource pursuant to Dispatch Instructions.

# III.13.7.1.5.8.3.1. Determination of the Hourly Real-Time Emergency Generation Resource Deviation.

An Hourly Real-Time Emergency Generation Resource Deviation shall be calculated for each Real-Time Emergency Generation Resource as the difference between the Average Hourly Output or Average Hourly Load Reduction of the Real-Time Emergency Generation Resource and the amount of output that the Market Participant with the resource was instructed in the Dispatch Instruction to produce in the Real-Time Emergency Generation Event Hour. The calculation of the Hourly Real-Time Emergency Generation Resource Deviation shall be determined in a manner that reflects that Real-Time Emergency Generation Resources are allowed 30 minutes from the beginning of the first Real-Time Emergency Generation Event Hour in consecutive Real-Time Emergency Generation Event Hours in a Dispatch Instruction for the same Operating Day to achieve the load reduction amount indicated in a Dispatch Instruction. The Total Negative Hourly Demand Resource Deviations for each hour shall be calculated as the absolute value of the sum of the negative Hourly Real-Time Demand Response Resource Deviations and negative Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. The Total Positive Hourly Demand Resource Deviations for each hour shall be calculated as the sum of the positive Hourly Real-Time Demand Response Resource Deviations and positive Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. If the Hourly Real-Time Emergency Generation Resource Deviation is greater than zero in any Real-Time Emergency Generation Event Hour, the Hourly Real-Time Emergency Generation Resource Deviation shall be multiplied by the lesser of: (i) one, or; (ii) the ratio of the Total Negative Hourly Demand Resource Deviations divided by the Total Positive Demand Resource Deviations in the same Dispatch Zone in the hour.

# III.13.7.1.5.9. Determination of Hourly Calculated Demand Resource Performance Values for Real-Time Demand Response Resources and Real-Time Emergency

# Generation Resources Starting with the Capacity Commitment Period beginning June 1, 2012.

Starting with the Capacity Commitment Period beginning June 1, 2012, the divisor described in (ii) of Sections III.13.7.1.5.7.3 and III.13.7.1.5.8.3, which is equal to the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast as determined by the ISO for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, shall be eliminated from the determination of Hourly Calculated Demand Resource Performance Values, with the exception of Demand Resources that cleared in the Forward Capacity Auctions for the Capacity Commitment Periods beginning June 1, 2010, and June 1, 2011 and June 1, 2017, in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its Demand Resource offer cleared. For Demand Resources with such multi-year Capacity Supply Obligations the divisor described in (ii) of Sections III.13.7.1.5.7.3 and III.13.7.1.5.8.3 shall continue to apply until the period elected by the Project Sponsor to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its Demand Resource offer cleared has expired.

# III.13.7.1.5.10. Demand Response Capacity Resources.

The performance of a Demand Response Capacity Resource with a Capacity Supply Obligation will be measured during Shortage Events as defined in Section III.13.7.1.1.1. A Demand Response Capacity Resource's Shortage Event Availability Score and hourly availability score shall be calculated in the manner described in Section III.13.7.1.1.1.A and III.13.7.1.1.2, respectively (with the hourly availability score adjusted pursuant to Section III.13.7.1.2.1). For the portion associated with the ability to reduce demand, Availability availability for Demand Response Capacity Resources would be adjusted for average avoided peak transmission and distribution losses or average avoided peak distribution losses as described in Section III.13.7.1.5.1 and Section III.13.7.1.5.1.1. For the portion associated with the ability to provide Net Supply, availability for Demand Response Capacity Resources would not be adjusted for average avoided peak transmission and distribution losses.

## III.13.7.1.5.10.1 Hourly Available MW.

A Demand Response Capacity Resource's available MW in each hour that contains any portion of a Shortage Event shall be determined based upon the sum of its associated Demand Response Resources as follows, provided, that in no case shall a Demand Response Capacity Resource's available MW in an hour exceed that resource's Qualified Capacity from the Forward Capacity Auction for the current

Capacity Commitment Period per Section III.13.1.4.1. For purposes of the following calculations, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5, of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, any Net Supply of a Net Supply Generator Asset located at the same Retail Delivery Point, hourly Desired Dispatch Point and Economic Maximum Limit of the Net Supply Generator Asset, shall be reducted by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset.

- (a) For a Demand Response Resource that reduces demand and is following Dispatch Instructions and for any associated Net Supply Generator Assets that are following Dispatch Instructions where the total Desired Dispatch Instruction-Point for the Demand Response Resource and the associated Net Supply Generator Assets is less than (the Maximum Reduction plus the Economic Maximum Limit for any associated available Net Supply Generator Assets) and greater than or equal to the Minimum Reduction, the available MW in an hour shall be the greater of (the resource's Real-Time Demand Reduction Obligation plus the Net Supply for any associated available Net Supply Generator Assets) and the lesser of (the resource's Demand Response Baseline as adjusted pursuant to Section III.8B.5 plus the Economic Maximum Limit for any associated available Net Supply Generator Assets), the resource's Hourly Adjusted Audited Demand Reduction, or (the resource's Maximum Reduction as submitted or redeclared by the Lead Market Participant for the resource plus the Economic Maximum Limit for any associated available Net Supply Generator Assets as submitted or redeclared by the Lead Market Participant).
- (b) For a Demand Response Resource that reduces demand and is following Dispatch Instructions and for any associated Net Supply Generator Assets that are following Dispatch Instruction where the total Desired Dispatch Instruction Point for the Demand Response Resource and the associated Net Supply Generator Assets is equal to Maximum Reduction plus the Economic Maximum Limit for any associated available Net Supply Generator Assets or (Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets equals Minimum Reduction plus Economic Minimum Limit for any associated available Net Supply Generator Assets) or total Desired Dispatch Instruction—Point for the Demand Response Resource and the associated Net Supply Generator Assets is less than the Minimum Reduction plus Economic Minimum Limit for any associated available Net Supply Generator Assets, the available MW in an hour shall be the resource's Real-Time Demand Reduction Obligation plus any associated Net Supply.

- (c) For a Demand Response Resource that has reduced demand <u>or any associated Net Supply</u>

  Generator Assets have been <u>dispatch</u> but <u>is-are</u> not responding to Dispatch Instructions where the RealTime Demand Reduction Obligation <u>plus any associated Net Supply</u> is less than the <u>total Desired</u>

  Dispatch <u>InstructionPoint for the Demand Response Resource and the associated Net Supply Generator Assets</u>, the available MW in an hour shall be the resource's Real-Time Demand Reduction Obligation plus any associated Net Supply for the hour.
- (d) For a Demand Response Resource that has reduced demand <u>or any associated Net Supply</u>

  <u>Generator Assets that have been dispatch</u> but <u>is-are</u> not responding to Dispatch Instructions where the Real-Time Demand Reduction Obligation is greater than the <u>total Desired</u> Dispatch <u>InstructionPoint for</u>

  <u>the Demand Response Resource and the associated Net Supply Generator Assets</u>, the available MW in an hour shall be the lesser of the resource's Real-Time Demand Reduction Obligation <u>plus any associated</u>

  <u>Net Supply</u> and Hourly Adjusted Audited Demand Reduction for the hour.
- (e) For a Demand Response Resource that is not reducing demand, is available for dispatch and is able to respond to Dispatch Instructions, and has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) and an Audited Full Reduction Time (adjusted for the Maximum Reduction and Economic Maximum Limit for any associated available Net Supply Generator Assets) of thirty minutes or less, the available MW in an hour shall be the lesser of (the lesser of (the resource's Maximum Reduction, as submitted or redeclared by the Lead Market Participant, and Actual Load) plus the sum of the Economic Maximum Limits for any associated available Net Supply Generator Assets as submitted or redeclared by the Lead market Participant) or Hourly Adjusted Audited Demand Reduction.
- (f) For a Demand Response Resource that is not reducing demand, is available for dispatch and is able to respond to Dispatch Instructions, and has an Audited Full Reduction Time (adjusted for the Maximum Reduction and Economic Maximum Limit for any associated available Net Supply Generator Assets as submitted or redeclared by the Lead Market Participant) or Offered Full Reduction Time (adjusted for the Audited Demand Reduction) greater than thirty minutes and less than or equal to 12 hours, the available MW shall be zero unless the duration of the Shortage Event exceeds the Audited Full Reduction Time (adjusted for the Maximum Reduction and Economic Maximum Limit for any associated available Net Supply Generator Assets) and Offered Full Reduction Time (adjusted for the Audited Demand Reduction), in which case the available MW in an hour shall be the lesser of (the lesser of (the resource's Maximum Reduction, as submitted or redeclared by the Lead Market Participant, the resource's Actual Load plus Economic Maximum Limits for any associated available Net Supply

Generator Assets as submitted or redeclared by the Lead Market Participant or the resource's Hourly Adjusted Audited Demand Reduction time weighted to reflect the portion of the hour in which the Demand Response Resource Notification Time and Demand Response Resource Start\_u\_p Time exceeded the Shortage Event duration.

(g) For a Demand Response Resource that (i) is not reducing demand, is available for dispatch and is able to respond to Dispatch Instructions, and has an Audited Full Reduction Time (adjusted for the Maximum Reduction <u>plus Economic Maximum Limit for any associated available Net Supply Generator Assets</u>) or Offered Full Reduction Time (adjusted for the Audited Demand Reduction) greater than 12 hours or (ii) is unavailable to reduce demand, the available MW shall be zero.

# III.13.7.1.5.10.1.1 Adjusted Audited Demand Reduction.

A Demand Response Resource's Adjusted Audited Demand Reduction shall be determined as follows. For purposes of these calculations, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5 of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the Economic Maximum Limit of the Net Supply Generator Asset at the same location shall be reduced by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset:

- (a) A Demand Response Resource that has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) equal to its Audited Full Reduction Time (adjusted for the Maximum Reduction <u>plus</u> Economic Maximum Limit for any associated available Net Supply Generator Assets) shall have its Adjusted Audited Demand Reduction set equal to the resource's Audited Demand Reduction.
- (b) A Demand Response Resource that has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) greater than its Audited Full Reduction Time (adjusted for the Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets) shall have its Adjusted Audited Demand Reduction calculated as:

((the Audited Full Reduction Time adjusted for the (Maximum Reduction <u>plus Economic</u>

Maximum Limit for any associated available Net Supply Generator Assets)) divided by (the Offered Full Reduction Time adjusted for the Audited Demand Reduction)) multiplied by the lesser of (the Audited

Demand Reduction or (Maximum Reduction as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets)).

(c) A Demand Response Resource that has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) less than its Audited Full Reduction Time (adjusted for the Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets) shall have its Adjusted Audited Demand Reduction calculated as:

((the Offered Full Reduction Time adjusted for the Audited Demand Reduction) divided by (the Audited Full Reduction Time adjusted for the (Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets))) multiplied by the lesser of (the Audited Demand Reduction or (Maximum Reduction as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets)).

# III.13.7.1.5.10.1.2 Hourly Adjusted Audited Demand Reduction.

The Hourly Adjusted Audited Demand Reduction shall be calculated as the time weighted average of the Adjusted Audited Demand Reduction and Audited Demand Reduction for the period the resource was dispatched.

# III.13.7.1.5.10.2 Availability Adjustments.

The hourly availability score of a Demand Response Capacity Resource shall be increased in the same manner as described in Section III.13.7.1.1.4(a). The hourly availability score of a Demand Response Capacity Resource comprised of an aggregation of one or more Demand Response Resources shall be adjusted as described in Section III.13.7.1.1.4(b). In the case of Demand Response Resources comprised of an aggregation of one or more Demand Response Assets with a demand reduction and any Net Supply of less than 5 MW achieved by the asset in the most recent seasonal audit of the associated Demand Response Capacity Resource, a planned outage scheduled in either December or January or during the period June 1 through September 15 may not be used to increase the resource's hourly availability score as described in Section III.13.7.1.1.4(b).

In addition, the hourly availability score of a Demand Response Capacity Resource shall be increased as described in this subsection:

- (a) A Demand Response Capacity Resource's hourly availability score shall be increased, subject to verification by the ISO, when one or more <u>Demand Response Aassets</u> of a Demand Response Resource associated with the Demand Response Capacity Resource is on a forced reduction or scheduled reduction.
  - (i) A forced reduction can be submitted to the ISO as described in the ISO New England Manuals for any reductions in demand that occur as a result of actions outside the control of the <a href="Demand Response">Demand Response</a> asset-Asset that is subject to the forced reduction. The forced reduction can be submitted or revised during the resettlement process and cannot exceed the demand reduction achieved by the <a href="Demand Response">Demand Response</a> asset-Asset in the most recent seasonal audit of the associated Demand Response Capacity Resource.
  - (ii) A scheduled reduction must be submitted to the ISO at least 15 days ahead of the start of the reduction to be eligible for an adjustment for any reductions in load that are the result of a scheduled plant shutdown or maintenance of energy consuming equipment. The scheduled reduction cannot exceed the demand reduction achieved by the <a href="Demand Response asset-Asset">Demand Response asset-Asset</a> in the most recent seasonal audit of the associated Demand Response Capacity Resource. Scheduled reductions must be a minimum of a single calendar day, and shall not exceed a total of 14 calendar days per Capacity Commitment Period.
- (b) The sum of the availability adjustments for an hour may not exceed:
  - (i) for online-a Demand Response Resource that has received a Dispatch Instruction to reduce its demand, the lesser of the resource's Demand Response Baseline as adjusted pursuant to Section III.8B.5 plus Economic Maximum Limit for any associated available Net Supply Generator Assets) and Audited Demand Reduction adjusted down by the greater of (the Maximum Reduction, as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets), or (Real-Time Demand Reduction Obligation plus Net Supply for any associated Net Supply Generator Assets). For purposes of this calculation, when the output of a Real-Time Emergency Generation Asset at the same location exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5, of a Demand Response Asset located at the same Retail Delivery Point, any Net Supply and the Economic Maximum Limit of the Net Supply Generator Asset at the same location shall be reduced by the difference between the Real-Time Emergency Generation Asset's output and adjusted Demand Response Baseline of the Demand Response Asset.

(ii) for offline-a Demand Response Resource that as not received a Dispatch Instruction to reduce its demand, the lesser of the resource's Actual Load plus Economic Maximum Limit for any associated available Net Supply Generator Assets, as submitted or redeclared by the Lead Market Participant), and the Audited Demand Reduction adjusted down by the greater of (the Maximum Reduction, as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets, as submitted or redeclared by the Lead Market Participant).

# III.13.7.1.6. Self-Supplied FCA Resources.

Self-Supplied FCA Resources are subject to the availability penalties and credits as defined by their resource type.

# III.13.7.2. Payments and Charges to Resources.

Resources acquiring or shedding a Capacity Supply Obligation shall be subject to payments and charges in accordance with this Section III.13.7.2. Such resources will also be subject to adjustments as detailed in Section III.13.7.2.7.

# III.13.7.2.1. Generating Capacity Resources.

# III.13.7.2.1.1. Monthly Capacity Payments.

Each resource that has: (i) cleared in a Forward Capacity Auction, except for the portion of resources designated as Self-Supplied FCA Resources or for resources not commercial during an Obligation Month pursuant to Section III.13.7.1.1.3(h); (ii) cleared in a reconfiguration auction; or (iii) entered into a Capacity Supply Obligation Bilateral shall be entitled to a monthly payment (subject to the adjustments in Section III.13.7.2.7) or charge during the Capacity Commitment Period as follows:

(a) **Forward Capacity Auction**. For a resource whose offer has cleared in a Forward Capacity Auction, the monthly capacity payment shall equal the product of its cleared capacity (or in the case described in Section III.13.7.1.1.3(i), the lesser of the resource's Capacity Supply Obligation or its audited amount) and the Capacity Clearing Price in the appropriate Capacity Zone in the New England Control Area as adjusted pursuant to Section III.13.2.7.3(b) and as adjusted by applicable indexing for resources with additional Capacity Commitment Period elections pursuant to Section III.13.1.1.2.2.4 in the manner described below (the "FCA Payment"). For a resource that has elected to have the Capacity Clearing Price and the Capacity Supply Obligation apply for more than one Capacity Commitment

Period, payments associated with the Capacity Supply Obligation and Capacity Clearing Price (indexed using the Handy-Whitman Index of Public Utility Construction Costs in effect as of December 31 of the year preceding the Capacity Commitment Period) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only.

- (b) **Reconfiguration Auctions**. For a resource whose offer or bid has cleared in an annual or monthly reconfiguration auction, the monthly capacity payment or charge shall be equal to the product of its cleared capacity and the appropriate reconfiguration auction clearing price in the Capacity Zone in which the resource cleared.
- (c) Capacity Supply Obligation Bilaterals. For resources that have acquired or shed a Capacity Supply Obligation through a Capacity Supply Obligation Bilateral, the monthly capacity payment or charge shall be equal to the product of the Capacity Supply Obligation being assumed or shed and price associated with the Capacity Supply Obligation Bilateral.

# III.13.7.2.2. Import Capacity.

Import Capacity Resources shall receive monthly capacity payments utilizing the same methodology as that used for Generating Capacity Resources set forth in Section III.13.7.2.1.

# III.13.7.2.2.A. Export Capacity.

If there are any Export Bids or Administrative Export De-list Bids from resources located in an export-constrained Capacity Zone or in the Rest-of-Pool Capacity Zone that have cleared in the Forward Capacity Auction and if the resource is exporting capacity at an export interface that is connected to an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone that is different than the Capacity Zone in which the resource is located, then charges and credits are applied as follows (for the following calculation, the Capacity Clearing Price will be the value prior to PER adjustments).

Charge Amount to Resource Exporting = [Capacity Clearing Price  $_{location \, of \, the \, interface}$  - Capacity Clearing Price  $_{location \, of \, the \, resource}$ ] x Cleared MWs of Export Bid or Administrative Export De-List Bid]

Credit Amount to Capacity Load Obligations in the Capacity Zone where the export interface is located= [Capacity Clearing Price location of the interface - Capacity Clearing Price location of the resource ] x Cleared MWs of Export Bid or Administrative Export De-list Bid]

Credits and charges to load in the applicable Capacity Zones, as set forth above, shall be allocated in proportion to each LSE's Capacity Load Obligation as calculated in Section III.13.7.3.1.

#### III.13.7.2.3. Intermittent Power Resources.

An Intermittent Power Resource shall be entitled to monthly payments during the Capacity Commitment Period calculated in the same manner as that used for Generating Capacity Resources as described in Section 13.7.2.1, except that any reduction in the Capacity Supply Obligation of an Intermittent Power Resource made pursuant to Section III.13.4.2.1.2.2.2.3 shall be at the same payment rate applicable to the reduced MW, such that there is a net zero payment for the reduced MW.

# III.13.7.2.4. Settlement Only Resources.

# III.13.7.2.4.1. Non-Intermittent Settlement Only Resources.

Non-Intermittent Settlement Only Resources shall be entitled to monthly payments during the Capacity Commitment Period calculated in the same manner as that used for Generating Capacity Resources as described in Section III.13.7.2.1.

#### III.13.7.2.4.2. Intermittent Settlement Only Resources.

Intermittent Settlement Only Resources shall be entitled to monthly payments during the Capacity Commitment Period calculated in the same manner as that used for Generating Capacity Resources as described in Section III.13.7.2.1, except that any reduction in the Capacity Supply Obligation of an Intermittent Settlement Only Resource made pursuant to Section III.13.4.2.1.2.2.2.3 shall be at the same payment rate applicable to the reduced MW, such that there is a net zero payment for the reduced MW.

#### III.13.7.2.5. Demand Resources.

# III.13.7.2.5.1. Monthly Capacity Payments for All Resources Except Real-Time Emergency Generation Resources.

For all Demand Resources except for Real-Time Emergency Generation Resources, the monthly payment shall be calculated in the same manner as for Generating Capacity Resources as described in Section III.13.7.2.1.1.

# III.13.7.2.5.2. Monthly Capacity Payments for Real-Time Emergency Generation Resources.

For Real-Time Emergency Generation Resources, monthly payments shall be calculated in the same manner as for Generating Capacity Resources as described in Section III.13.7.2.1.1, except that such payments may also be adjusted as described in Section III.13.2.3.3(f).

# III.13.7.2.5.3. Energy Settlement for Real-Time Demand Response Resources

A Market Participant with Real-Time Demand Response Assets associated with a Real-Time Demand Response Resource that is dispatched or audited pursuant to Section III.13 shall be paid or charged for demand reductions, adjusted for net supply as described in Section III.E1.8.3 and for the percent average avoided peak distribution losses, at the Real-Time LMP for the Load Zone in which the Real-Time Demand Response Resource is located. The demand reduction paid or charged shall be net of the Real-Time Demand Reduction Obligation of Real-Time Demand Response Assets that are part of the Real-Time Demand Response Resource that received payment pursuant to Sections III.E1.9.2.1 or III.E1.9.2.2 for the same dispatch or audit period. Demand reductions eligible for payments or charges pursuant to this section shall be those produced during Real-Time Demand Response Event Hours or, in the case of an audit, for the period during which the ISO has requested the resource to audit.

# III.13.7.2.5.4. Energy Settlement for Real-Time <u>Emergency</u> Generation Resources

A Market Participant with Real-Time Emergency Generation Assets associated with a Real-Time Emergency Generation Resource that is dispatched or audited pursuant to Section III.13 shall be paid or charged for demand reductions or generator output, adjusted for net supply as described in Section III.E1.8.3 or III.13.7.2.5.4.1 and for the percent average avoided peak distribution losses for the portion of the asset reducing demand, at the Real-Time LMP for the Load Zone in which the Real-Time Emergency Generation Resource is located for Capacity Commitment Periods commencing prior to June 1, 2017, and at the Real-Time LMP for the Dispatch Zone in which the Real-Time Emergency Generation Resource is located for Capacity Commitment Periods commencing on or after June 1, 2017. Demand reductions or generator output eligible for payments or charges pursuant to this section shall be those produced during Real-Time Emergency Generation Event Hours or, in the case of an audit, for the period during which the ISO has requested the resource to audit.

#### III.13.7.2.5.4.1 Adjustment for Net Supply Generator Assets

For Capacity Commitment Periods commencing on or after June 1, 2017, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section 8B.5, of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the output eligible for payments will be set equal the adjusted Demand Response Baseline of the Demand Response Asset.

# III.13.7.2.6. Self-Supplied FCA Resources.

Self-Supplied FCA Resources shall not receive monthly capacity payments for the portion of the resource designated as a Self-Supplied FCA Resource. Charges to load associated with Self-Supplied FCA Resources are calculated pursuant to Section III.13.7.3.

# III.13.7.2.7. Adjustments to Monthly Capacity Payments.

Monthly capacity payments to resources with a Capacity Supply Obligation as of the beginning of the Obligation Month will be adjusted as described in Section III.13.7.2.7.1.

# III.13.7.2.7.1. Adjustments to Monthly Capacity Payments of Generating Capacity Resources.

#### III.13.7.2.7.1.1. Peak Energy Rents.

Payments to New Generating Capacity Resources and Existing Generating Capacity Resources with Capacity Supply Obligations, except for resources not commercial as described in Section III.13.7.1.1.3(h) or Section III.13.7.1.1.3(i), shall be decreased by Peak Energy Rents ("PER") calculated in each Capacity Zone, as determined pursuant to Section III.13.2.3.4 in the Forward Capacity Auction, as provided below. The PER calculation shall utilize hourly integrated Real-Time LMPs. For each Capacity Zone in the Forward Capacity Auction, as determined pursuant to Section III.13.2.3.4, PER shall be computed based on the load-weighted Real-Time LMPs for each Capacity Zone, using the Real-Time Hub Price for the Rest-of-Pool Capacity Zone.

# **III.13.7.2.7.1.1.1.** Hourly PER Calculations.

(a) For hours with a positive difference between the hourly Real-Time energy price and a strike price, the ISO shall compute PER for each hour ("Hourly PER") equal to this positive difference in

accordance with the following formula, which includes scaling adjustments for system load and availability:

Hourly PER(\$/kW) = [(LMP - Strike Price) \* [Scaling Factor] \* [Availability Factor] Where:

Strike Price = the heat rate x fuel cost of the PER Proxy Unit described below.

Scaling Factor = the ratio of actual hourly integrated system load (calculated as the sum of Real-Time Load Obligations for the system as calculated in the settlement of the Real-Time Energy Market and adjusted for losses and including imports delivered in the Real-Time Energy Market) and the 50/50 predicted peak system load reduced appropriately for Demand Resources, used in the most recent calculation of the Installed Capacity Requirement for that Capacity Commitment Period, capped at an hourly ratio of 1.0.

Availability Factor = 0.95

- (b) PER Proxy Unit characteristics shall be as follows:
  - (i) The PER Proxy Unit shall be indexed to the marginal fuel, which shall be the higher of ultra low-sulfur No. 2 oil measured at New York Harbor plus a seven percent markup for transportation or day-ahead gas measured at the Algonquin City Gate, as determined on a daily basis;
  - (ii) The PER Proxy Unit shall be assumed to have no start-up, ramp rate or minimum run time constraints;
  - (iii) The PER Proxy Unit shall have a 22,000 Btu/kWh heat rate. This assumption shall be periodically reviewed after the first Capacity Commitment Period by the ISO to ensure that the heat rate continues to reflect a level slightly higher than the marginal generating unit in the region that would be dispatched as the system enters a scarcity condition. Any changes to the heat rate of the PER Proxy Unit shall be considered in the stakeholder process in consultation with the state utility regulatory agencies, shall be filed pursuant to Section 205 of the Federal Power Act, and shall be applied prospectively to the settlement of future Forward Capacity Auctions.

# III.13.7.2.7.1.1.2. Monthly PER Application.

(a) The Hourly PER shall be summed for each calendar month to determine the total PER for that month ("Monthly PER"). The ISO shall then calculate the Average Monthly PER earned by the proxy unit. The Average Monthly PER shall be equal to the average of the Monthly PER values for the 12 months prior to the Obligation Month. The PER deduction for each resource shall be calculated as follows:

PER Adjustment = the minimum of: (i) the PER cap or (ii) the Average Monthly PER x PER Capacity Supply Obligation.

Where the PER cap for each resource equals the FCA Payment, plus the product of the net value of any other Capacity Supply Obligations assumed or shed after the Forward Capacity Auction for the same Capacity Commitment Period multiplied by the Capacity Clearing Price applicable to that resource's location from that Forward Capacity Auction. Where the calculation results in a PER cap value less than zero, the PER cap will be revised to zero.

Where the PER Capacity Supply Obligation is equal to the minimum of the Capacity Supply Obligation or the Capacity Supply Obligation less any Capacity Supply Obligation MW from any portion of a Self-Supplied FCA Resource. However, if the Capacity Supply Obligation less any Capacity Supply Obligation from any portion of a Self-Supplied FCA Resource is less than zero, it will be zero for purposes of comparing it to the Capacity Supply Obligation in the PER Capacity Supply Obligation calculation.

- (b) PER shall be deducted from capacity payments independently of availability penalties.
- (c) FCA Payment minus PER may not be negative for any month.

# III.13.7.2.7.1.2. Availability Penalties.

Availability penalties shall be assessed for each resource with a Capacity Supply Obligation as of the beginning of the Obligation Month. The penalty will be based on the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b) or as described in Section III.13.2.8) in the Capacity Zone in which the resource is located for the relevant Capacity Commitment Period, regardless of whether the resource

assumed the Capacity Supply Obligation through a Forward Capacity Auction, a reconfiguration auction, or a Capacity Supply Obligation Bilateral.

For capacity resources that are partially or fully unavailable during a Shortage Event:

- (a) Penalties shall be determined and assessed on a resource-specific basis. Penalties shall be calculated for each Shortage Event during an Obligation Month and assessed on a monthly basis, subject to the availability penalty caps outlined in Section III.13.7.2.7.1.3.
- (b) The penalty per resource for each Shortage Event shall be equal to:

  Penalty = [Resource's Annualized FCA Payment]\*PF\*[1 Shortage Event Availability Score]

Where:

Annualized FCA Payment = the relevant Capacity Clearing Price, or in the case of Inadequate Supply or Insufficient Competition, the payment as described in Section III.13.2.8, (as adjusted pursuant to Section III.13.2.7.3(b)) multiplied by the resource's Capacity Supply Obligation as of the beginning of the Obligation Month multiplied by 12.

PF = .05 for Shortage Events of 5 hours or less. PF is increased by .01 for each additional hour above 5 hours.

#### III.13.7.2.7.1.3. Availability Penalty Caps.

The following caps will apply to the total availability penalties assessed to a resource. If a resource with a Capacity Supply Obligation sheds or acquires an obligation outside the relevant Obligation Month, the Annualized FCA Payment shall not be prorated. Caps are resource-specific and partial year assumption or transfer of a Capacity Supply Obligation through Capacity Supply Obligation Bilaterals or reconfiguration auctions does not affect the application of the cap to each resource independently.

- (a) **Per Day**. In no case shall the total penalties for all Shortage Events in an Operating Day exceed 10 percent of a resource's Annualized FCA Payment for that Capacity Commitment Period.
- (b) **Per Month**. The sum of a resource's penalties arising from unavailability during an Obligation Month may not exceed two and one-half times the Annualized FCA Payment, divided by twelve, for that

Obligation Month. The sum of a resource's penalties arising from unavailability due to a single outage of four days or less but spanning two calendar months may not exceed two and one-half times the average of the Annualized FCA Payments, divided by twelve, for both months.

(c) **Per Capacity Commitment Period**. In determining the availability penalties for the Obligation Month, a resource's cumulative availability penalties for a Capacity Commitment Period may not exceed its Annualized FCA Payment (less PER adjustments) for that Capacity Commitment Period.

# III.13.7.2.7.1.4. Availability Credits for Capacity Demand Response Capacity Resources, Generating Capacity Resources, Import Capacity Resources and SelfSupplied FCA Resources.

On a monthly basis, penalties received from unavailable resources shall be redistributed to Demand Response Capacity Resources, Generating Capacity Resources and Import Capacity Resources with Capacity Supply Obligations and to designated Supplemental Capacity Resources without a Capacity Supply Obligation that have a valid Supplemental Availability Bilateral (pursuant to Section III.13.5.3.2) that were available (pursuant to Section III.13.7.1.1.3, Section III.13.7.1.5.10.1) in the respective hours on a Capacity Zone basis as follows: For each Obligation Month, the penalties assessed for the Shortage Events during the month will be credited to those resources identified above that were available, in whole or in part, during the Shortage Events, pro-rata by hourly available MW in the relevant Capacity Zones. Self-Supplied FCA Resources shall be eligible to receive their pro rata share of availability penalties paid by other capacity resources.

# III.13.7.2.7.2. Import Capacity.

In addition to the adjustment in this section, Import Capacity Resources shall also be subject to the same adjustments as Generating Capacity Resources as described in Section III.13.7.2.7.1.

# III.13.7.2.7.2.1. External Transaction Offer and Delivery Performance Adjustments.

In the event that the conditions in Section III.13.6.1.2.1 are not met in any hour of an Operating Day, the Import Capacity Resource will be subject to the following:

(a) If in any hour of an Operating Day a priced External Transaction associated with an Import Capacity Resource with a Capacity Supply Obligation is offered above both the offer threshold for the Operating Day and the offer threshold of the prior Operating Day, and for any priced External Transactions from the New York Control Area also is offered above the corresponding hourly day-ahead

energy price (NYISO Location-Based Marginal Price) at the source interface, the Market Participant with the Import Capacity Resource will pay a penalty equal to the product of the Import Capacity Resource's Capacity Supply Obligation and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of days in the month.

- (b) For every hour of an Operating Day that the total amount offered from all External Transactions associated with an Import Capacity Resource is less than the Import Capacity Resource's Capacity Supply Obligation, the Market Participant with the Import Capacity Resource will pay a penalty equal to the product of the difference between the Capacity Supply Obligation and the total amount of energy offered for that hour and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of hours in the month. For each Operating Day only the greater of the total penalties in either the Day-Ahead Energy Market or Real-Time Energy Market will be assessed. For the purposes of this section the total energy offered will be adjusted in accordance with Section III.13.7.1.1.4(b) for any amount that was unavailable due to an outage approved in the ISO's annual maintenance scheduling process.
- (c) Except as specified in Section III.13.7.2.7.2.2, for every hour the total energy from an External Transaction associated with an Import Capacity Resource delivered in real-time to the New England Control Area is less than the energy requested, the Market Participant with the Import Capacity Resource will pay a penalty equal to the product of the difference between the quantity requested and the quantity delivered and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of hours in the month.

Any External Transaction associated with an Import Capacity Resource that is determined to be in economic merit during the next-hour scheduling process will be considered a requested transaction and the ISO may request all or a portion of each transaction.

A Market Participant's total penalty amount for a single Operating Day for each Import Capacity Resource shall be no more than the product of the Import Capacity Resource's Capacity Supply Obligation and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of days in the month.

Each Obligation Month the penalty amounts from all Market Participants with Import Capacity Resources will be allocated to all Market Participants based on their pro-rata share of Capacity Load Obligation

within each Capacity Zone in the Obligation Month, with each Capacity Zone allocated an amount based on the pro-rata share of total capacity credits within each Capacity Zone.

# III.13.7.2.7.2.2. Exceptions.

- a) No penalty will be assessed if the applicable external interface is fully loaded and the energy from an External Transaction that would otherwise be requested cannot flow. If the transfer capability of the applicable external interface is zero in the import direction it will be considered fully loaded for the purpose of this section.
- b) No penalty will be assessed if the delivered energy from a priced External Transaction associated with the New York Control Area is less than requested when the Real-Time Energy Market price at the source location (NYISO Location-Based Marginal Price) is higher than the Real-Time LMP at the associated External Node, provided that Operating Procedure No. 4 has not been declared due to a system-wide capacity deficiency.
- c) No penalty will be assessed during periods when the ISO has taken action to reduce import transactions due to a Minimum Generation Emergency condition or due to ramping constraints.
- d) No penalty will be assessed on the affected external interface during periods when minimumflow or directional-flow constraints have occurred, when the ISO was unable to utilize the automated check-out processes for the external interface, or when in-hour curtailments have occurred.

# III.13.7.2.7.3. Intermittent Power Resources.

Monthly capacity payments to Intermittent Power Resources are subject to PER adjustments but are not subject to any additional availability penalties.

# III.13.7.2.7.4. Settlement Only Resources.

# III.13.7.2.7.4.1. Non-Intermittent Settlement Only Resources.

Non-Intermittent Settlement Only Resources are subject to the same PER adjustments and availability penalties as Generating Capacity Resources as described in Section III.13.7.2.7.1.

# III.13.7.2.7.4.2. Intermittent Settlement Only Resources.

Monthly capacity payments to Intermittent Power Resources are subject to PER adjustments but are not subject to any additional availability penalties.

#### III.13.7.2.7.5. Demand Resources.

Demand Response Capacity Resources shall be subject to the same adjustments as Generating Capacity Resources as described in Section III.13.7.2.7.1.

# III.13.7.2.7.5.1. Calculation of Monthly Capacity Variances.

For each month, the Monthly Capacity Variance of a Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource shall be calculated by subtracting the Demand Resource's Capacity Supply Obligation for the month from the Demand Resource's monthly Capacity Value. If a Demand Resource's Monthly Capacity Variance is zero, the Demand Resource will not be subject to Demand Resource Performance Penalties or Demand Resource Performance Incentives.

# III.13.7.2.7.5.2. Negative Monthly Capacity Variances.

With the exception of a Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that offer cleared, if a Demand Resource's Monthly Capacity Variance is a negative value, the Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource shall be subject to a Demand Resource Performance Penalty equal to the absolute value of the Monthly Capacity Variance multiplied by the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) in the Forward Capacity Auction for the relevant Capacity Commitment Period or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section III.13.2.3.3(f). If a Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that offer cleared has a Monthly Capacity Variance with a negative value, the Demand Resource Performance Penalty for such a Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource shall be set according to the Capacity

Clearing Price applicable to the Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource (as adjusted pursuant to Section III.13.2.7.3(b)), indexed using the Handy-Whitman Index of Public Utility Construction Costs in effect as of December 31, of the year preceding the Capacity Commitment Period applicable to the Demand Resource for the particular Capacity Commitment Period or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section III.13.2.3.3(f), indexed using the Handy-Whitman Index of Public Utility Construction Costs, applicable to the Demand Resource for the particular Capacity Commitment Period.

# III.13.7.2.7.5.3. Positive Monthly Capacity Variances.

With the exception of a Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that offer cleared, if a Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource's Monthly Capacity Variance is a positive value, then the Demand Resource shall be eligible to receive a Demand Resource Performance Incentive based on the Monthly Capacity Variance multiplied by the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) in the Forward Capacity Auction for the relevant Capacity Commitment Period, or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section III.13.2.3.3(f), provided that the sum of the Demand Resource Performance Penalties in the month in the Capacity Zone where the Demand Resource or Real-Time Emergency Generation Resource is located is equal to or greater than the sum of the Demand Resource Performance Incentives in the same month in that Capacity Zone. If a Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that offer cleared has a Monthly Capacity Variance with a positive value, then the Demand Resource Performance Incentive for such a Demand Resource shall be set according to the Capacity Clearing Price applicable to the Demand Resource for the particular Capacity Commitment Period (as adjusted pursuant to Section III.13.2.7.3(b)), indexed using the Handy-Whitman Index of Public Utility Construction Costs or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section

III.13.2.3.3(f), indexed using the Handy-Whitman Index of Public Utility Construction Costs, applicable to the Real-Time Emergency Generation, Real-Time Demand Response, Critical Peak, On-Peak and Seasonal Peak Demand Resource for the particulate Capacity Commitment Period in effect as of December 31 of the year preceding the Capacity Commitment Period, provided that the sum of the Demand Resource Performance Penalties in the month in the Capacity Zone where the Demand Resource or Real-Time Emergency Generation Resource is located is equal to or greater than the sum of the Demand Resource Performance Incentives in the same month in that Capacity Zone.

# III.13.7.2.7.5.4. Determination of Net Demand Resource Performance Penalties and Demand Resource Performance Incentives.

Demand Resource Performance Penalties and Demand Resource Performance Incentives shall be determined for each Capacity Zone as follows: if the sum of the Demand Resource Performance Penalties in a month in a Capacity Zone is less than the sum of the Demand Resource Performance Incentives in the same month in that Capacity Zone, then the total amount of Demand Resource Performance Penalties shall be paid on a pro-rata basis, based on the non-prorated Demand Resource Performance Incentives of each Demand Resource with a positive Monthly Capacity Variance. The total amount of the Demand Resource Performance Incentives in a month in a Capacity Zone cannot exceed the total amount of the Demand Resource Performance Penalties in the same month in that Capacity Zone.

The total of the Demand Resource Performance Incentives in a month in a Capacity Zone cannot exceed the total of the Demand Resource Performance Penalties in the same month in that Capacity Zone. If the total Demand Resource Performance Penalties in a month in a Capacity Zone exceeds the total Demand Resource Performance Incentives in the same month in that Capacity Zone, the difference shall not be collected from load serving entities in that Capacity Zone (the ultimate purchaser of capacity).

# III.13.7.2.7.6. Self-Supplied FCA Resources.

Self-Supplied FCA Resources shall not be subject to a PER adjustment on the portion of the resource that is self-supplied, but shall be subject to the availability penalties and caps applicable to their resource types.

# III.13.7.3. Charges to Market Participants with Capacity Load Obligations.

A load serving entity with a Capacity Load Obligation as of the end of the Obligation Month shall be subject to a charge equal to the product of: (a) its Capacity Load Obligation in the Capacity Zone; and (b)

the applicable Net Regional Clearing Price. The Net Regional Clearing Price is defined as the sum of the total payments as defined in Section III.13.7.2 paid to resources with Capacity Supply Obligations in the Capacity Zone (excluding any capacity payments and charges made for Capacity Supply Obligation Bilaterals), less PER adjustments for resources in the zone as defined in Section 13.7.2.7.1.1, adjusted for any Demand Resource Performance Penalties in excess of Demand Resource Performance Incentives as described in Section III.13.7.2.7.5.4, and including any applicable export charges or credits as determined pursuant to Section III.13.7.2.2.A divided by the sum of all Capacity Supply Obligations (excluding (i) the quantity of capacity subject to Capacity Supply Obligation Bilaterals and (ii) the quantity of capacity clearing as Self-Supplied FCA Resources) assumed by resources in the zone. A load serving entity satisfying its Capacity Load Obligation by a Self-Supplied FCA Resource shall not receive a credit for any PER payment for its Capacity Load Obligation so satisfied.

# III.13.7.3.1. Calculation of Capacity Requirement and Capacity Load Obligation.

The ISO shall assign each load serving entity a Capacity Requirement prior to the commencement of each Obligation Month for each Capacity Zone established in the Forward Capacity Auction pursuant to Section III.13.2.3.4. The Capacity Requirement for each month and Capacity Zone shall equal the product of: (i) the total of the system-wide Capacity Supply Obligations (excluding the quantity of capacity subject to Capacity Supply Obligation Bilaterals) plus HQICCs; and (ii) the ratio of the sum of all load serving entities' annual coincident contributions to the system-wide annual peak load in that Capacity Zone from the calendar year two years prior to the start of the Capacity Commitment Period to the system-wide sum of all load serving entities' annual coincident contributions to the system-wide annual peak load from the calendar year two years prior to the start of the Capacity Commitment Period. The following loads are assigned a peak contribution of zero for the purposes of assigning obligations and tracking load shifts: load associated with pumping of pumped hydro generators, if the resource was pumping; Station service load that is modeled as a discrete Load Asset and the Resource is complying with the maintenance scheduling procedures of the ISO; and transmission losses associated with delivery of energy over the Control Area tie lines.

A load serving entity's Capacity Requirement for each month and Capacity Zone shall equal the product of: (i) the Capacity Zone's Capacity Requirement as calculated above and (ii) the ratio of the sum of the load serving entity's annual coincident contributions to the system-wide annual peak load in that Capacity Zone from the calendar year prior to the start of the Capacity Commitment Period to the sum of all load serving entities' annual coincident contributions to the system-wide annual peak load in that Capacity Commitment Period from the calendar year prior to the start of the Capacity Commitment Period.

A load serving entity's Capacity Load Obligation shall be its Capacity Requirement, adjusted as appropriate to account for any relevant Capacity Load Obligation Bilaterals, HQICCs, and Self-Supply FCA Resource designations. A Capacity Load Obligation can be a positive or negative value. A Market Participant that is not a load serving entity shall have a Capacity Load Obligation equal to the net obligation resulting from Capacity Load Obligation Bilaterals, HQICC, and Self-Supply FCA Resource designations.

A Demand Resource's Demand Reduction Value will not be reconstituted into the load of the Demand Resource for the purpose of determining the Capacity Requirement for the load associated with the Demand Resource.

# III.13.7.3.1.1. HQICC Used in the Calculation of Capacity Requirements.

In order to treat HQICCs as a load reduction, each holder of HQICCs shall have its Capacity Requirement in the Capacity Zone in which the HQ Phase I/II external node is located as specified in Section III.13.1.3 adjusted by its share of the total monthly HQICC amount.

# III.13.7.3.1.2. Charges Associated with Self-Supplied FCA Resources.

The capacity associated with a Self-Supplied FCA Resource shall be treated as a credit toward the Capacity Load Obligation of the load serving entity so designated by such resources as described in Section III.13.1.6. The amount of Self-Supplied FCA Resources shall be determined pursuant to Section III.13.1.6.

# III.13.7.3.1.3. Charges Associated with Dispatchable Asset Related Demands.

Dispatchable Asset Related Demand resources will not receive Forward Capacity Market payments, but instead each Dispatchable Asset Related Demand resource will receive an adjustment to its share of the associated Coincident Peak Contribution based on the ability of the Dispatchable Asset Related Demand resource to reduce consumption. The adjustment to a load serving entity's Coincident Peak Contribution resulting from Dispatchable Asset Related Demand resource reduction in consumption shall be based on the Nominated Consumption Limit submitted for the Dispatchable Asset Related Demand resource. The Nominated Consumption Limit value of each Dispatchable Asset Related Demand resource is subject to adjustment as further described in the ISO New England Manuals, including adjustments based on the results of Nominated Consumption Limit audits performed in accordance with the ISO New England Manuals.

#### III.13.7.3.2. Excess Revenues.

Revenues collected from load serving entities in excess of revenues paid by the ISO to resources shall be paid by the ISO to the holders of Capacity Transfer Rights, as detailed in Section III.13.7.3.3.

#### III.13.7.3.3. Capacity Transfer Rights.

# III.13.7.3.3.1. Definition and Payments to Holders of Capacity Transfer Rights.

The ISO shall create Capacity Transfer Rights ("CTRs") for each internal interface associated with a Capacity Zone established in the Forward Capacity Auction (as determined pursuant to Section III.13.2.3.4). Based upon results of the Forward Capacity Auction and reconfiguration auctions, the total CTR fund will be calculated as the difference between the charges to load serving entities with Capacity Load Obligations and the payments to Capacity Resources as follows: The system-wide sum of the product of each Capacity Zone's Net Regional Clearing Price and absolute value of each Capacity Zone's Capacity Load Obligations, as calculated in Section III.13.7.3.1, minus the sum of the monthly capacity payments to Capacity Resources within each zone, as adjusted for PER and for Demand Resource Performance Penalties net of Demand Resource Performance Incentives.

Each Capacity Zone established in the Forward Capacity Auction (as determined pursuant to Section III.13.2.3.4) will be assigned its portion of the CTR fund.

For CTRs resulting from an export constrained zone, the assignment will be calculated as the product of: (i) the Net Regional Clearing Price for the Capacity Zone to which the applicable interface limits the transfer of capacity minus the Net Regional Clearing Price for the Capacity Zone from which the applicable interface limits the transfer of capacity; and (ii) the difference between the absolute value of the total Capacity Supply Obligations obtained in the exporting Capacity Zone, adjusted for Capacity Supply Obligations associated with Self-Supply FCA Resources, and the absolute value of the total Capacity Load Obligations in the exporting Capacity Zone.

For CTRs resulting from an import constrained zone, the assignment will be calculated as the product of: (i) the Net Regional Clearing Price for the Capacity Zone to which the applicable interface limits the transfer of capacity minus the Net Regional Clearing Price for the absolute value of the Capacity Zone from which the applicable interface limits the transfer of capacity; and (ii) the difference between absolute value of the total Capacity Load Obligations in the importing Capacity Zone and the total

Capacity Supply Obligations obtained in the importing Capacity Zone, adjusted for Capacity Supply Obligations associated with Self-Supply FCA Resources.

The value of CTRs specifically allocated pursuant to Sections III.13.7.3.3.2(c), III.13.7.3.3.4, and III.13.7.3.3.6 shall be calculated as the product of: (i) the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) for the Capacity Zone to which the applicable interface limits the transfer of capacity minus the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) for the Capacity Zone from which the applicable interface limits the transfer of capacity; and (ii) the MW quantity of the specifically allocated CTRs across the applicable interface. The value of the specifically allocated CTRs will be deducted from the associated Capacity Zone's portion of the CTR fund. The balance of the CTR fund will then be allocated to the load serving entities as set forth in Section III.13.7.3.3.2.

# III.13.7.3.3.2. Allocation of Capacity Transfer Rights.

For Capacity Zones established in the Forward Capacity Auction as determined pursuant to Section III.13.2.3.4, the CTR fund shall be allocated among load serving entities using their Capacity Load Obligation (net of HQICCs) described in Section III.13.7.3.1. Market Participants with CTRs specifically allocated under Section III.13.7.3.3.6 will have their specifically allocated CTR MWs netted from their Capacity Load Obligation used to establish their share of the CTR fund.

- (a) **Connecticut Import Interface**. The allocation of the CTR fund associated with the Connecticut Import Interface shall be made to load serving entities based on their Capacity Load Obligation in the Connecticut Capacity Zone.
- (b) **NEMA/Boston Import Interface**. Except as provided in Section III.13.7.3.3.6 of Market Rule 1, the allocation of the CTR fund associated with the NEMA/Boston Import Interface shall be made to load serving entities based on their Capacity Load Obligation in the NEMA/Boston Capacity Zone.
- (c) Maine Export Interface. Casco Bay shall receive specifically allocated CTRs of 325 MW across the Maine Export Interface for as long as Casco Bay continues to pay to support the transmission upgrades. Each municipal utility entitlement holder of a resource constructed as a Pool-Planned Unit in Maine shall receive specifically allocated CTRs across the Maine Export Interface equal to the applicable seasonal claimed capability of its ownership entitlements in such unit as described in Section III.13.7.3.3.6. The balance of the CTR fund associated with the Maine Export Interface shall be allocated

to load serving entities with a Capacity Load Obligation on the import-constrained side of the Maine Export Interface.

# III.13.7.3.3.3. Allocations of CTRs Resulting From Revised Capacity Zones.

The portion of the CTR fund associated with revised definitions of Capacity Zones shall be fully allocated to load serving entities after deducting the value of applicable CTRs that have been specifically allocated. Allocations of the CTR fund among load serving entities will be made using their Capacity Load Obligations (net of HQICCs) as described in Section III.13.7.3.3.1. Market Participants with CTRs specifically allocated under Section III.13.7.3.3.6 will have their specifically allocated CTR MWs netted from the Capacity Load Obligation used to establish their share of the CTR fund.

- (a) **Import Constraints.** The allocation of the CTR fund associated with newly defined import-constrained Capacity Zones restricting the transfer of capacity into a single adjacent import-constrained Capacity Zone shall be allocated to load serving entities with Capacity Load Obligations in that import-constrained Capacity Zone.
- (b) **Export Constraints.** The allocation of the CTR fund associated with newly defined export-constrained Capacity Zones shall be allocated to load serving entities with Capacity Load Obligations on the import-constrained side of the interface.

# III.13.7.3.3.4. Specifically Allocated CTRs Associated with Transmission Upgrades.

- (a) A Market Participant that pays for transmission upgrades not funded through the Pool PTF Rate and which increase transfer capability across existing or potential Capacity Zone interfaces may request a specifically allocated CTR in an amount equal to the number of CTRs supported by that increase in transfer capability.
- (b) The allocation of additional CTRs created through generator interconnections completed after February 1, 2009 shall be made in accordance with the provisions of the ISO generator interconnection or planning standards. In the event the ISO interconnection or planning standards do not address this issue, the CTRs created shall be allocated in the same manner as described in Section III.13.7.3.3.2.
- (c) Specifically allocated CTRs shall expire when the Market Participant ceases to pay to support the transmission upgrades.

(d) CTRs resulting from transmission upgrades funded through the Pool PTF Rate shall not be specifically allocated but shall be allocated in the same manner as described in Section III.13.7.3.3.2.

# III.13.7.3.3.5. [Reserved.]

# III.13.7.3.3.6. Specifically Allocated CTRs for Pool Planned Units.

In import-constrained Capacity Zones, in recognition of longstanding life of unit contracts, the municipal utility entitlement holder of a resource constructed as Pool-Planned Units shall receive an initial allocation of CTRs equal to the applicable seasonal claimed capability of the ownership entitlements in such unit. Municipal utility entitlements are set as shown in the table below and are not transferrable.

|            |             |          |                     |                     |                     |                  |                  |            | Summer | Winter |
|------------|-------------|----------|---------------------|---------------------|---------------------|------------------|------------------|------------|--------|--------|
|            | Millstone 3 | Seabrook | Stonybrook<br>GT 1A | Stonybrook<br>GT 1B | Stonybrook<br>GT 1C | Stonybrook<br>2A | Stonybrook<br>2B | Wyman<br>4 | (MW)   | (MW)   |
| Nominal    |             |          |                     |                     |                     |                  |                  |            |        |        |
| Summer     |             |          |                     |                     |                     |                  |                  |            |        |        |
| (MW)       | 1155.001    | 1244.275 | 104.000             | 100.000             | 104.000             | 67.400           | 65.300           | 586.725    |        |        |
| Nominal    |             |          |                     |                     |                     |                  |                  |            |        |        |
| Winter     |             |          |                     |                     |                     |                  |                  |            |        |        |
| (MW)       | 1155.481    | 1244.275 | 119.000             | 116.000             | 119.000             | 87.400           | 85.300           | 608.575    |        |        |
|            |             |          | ı                   | I                   | <u> </u>            | <u> </u>         | I                | •          |        |        |
| Danvers    | 0.2627%     | 1.1124%  | 8.4569%             | 8.4569%             | 8.4569%             | 11.5551%         | 11.5551%         | 0.0000%    | 58.26  | 63.73  |
| Georgetown | 0.0208%     | 0.0956%  | 0.7356%             | 0.7356%             | 0.7356%             | 1.0144%          | 1.0144%          | 0.0000%    | 5.04   | 5.55   |
| Ipswich    | 0.0608%     | 0.1066%  | 0.2934%             | 0.2934%             | 0.2934%             | 0.0000%          | 0.0000%          | 0.0000%    | 2.93   | 2.37   |
| Marblehead | 0.1544%     | 0.1351%  | 2.6840%             | 2.6840%             | 2.6840%             | 1.5980%          | 1.5980%          | 0.2793%    | 15.49  | 15.64  |
| Middleton  | 0.0440%     | 0.3282%  | 0.8776%             | 0.8776%             | 0.8776%             | 1.8916%          | 1.8916%          | 0.1012%    | 10.40  | 11.07  |
| Peabody    | 0.2969%     | 1.1300%  | 13.0520%            | 13.0520%            | 13.0520%            | 0.0000%          | 0.0000%          | 0.0000%    | 57.69  | 60.26  |
| Reading    | 0.4041%     | 0.6351%  | 14.4530%            | 14.4530%            | 14.4530%            | 19.5163%         | 19.5163%         | 0.0000%    | 82.98  | 92.77  |
| Wakefield  | 0.2055%     | 0.3870%  | 3.9929%             | 3.9929%             | 3.9929%             | 6.3791%          | 6.3791%          | 0.4398%    | 30.53  | 32.64  |

This allocation of CTRs shall expire on December 31, 2040. If a resource listed in the table above retires prior to December 31, 2040, however, its allocation of CTRs shall expire upon retirement. In the event that the NEMA zone either becomes or is forecast to become a separate zone for Forward Capacity Auction purposes, National Grid agrees to discuss with Massachusetts Municipal Wholesale Electric Company ("MMWEC") and Wellesley Municipal Light Plant, Reading Municipal Light Plant and Concord Municipal Light Plant ("WRC") any proposal by National Grid to develop cost effective transmission improvements that would mitigate or alleviate the import constraints and to work cooperatively and in good faith with MMWEC and WRC regarding any such proposal. MMWEC and WRC agree to support any proposals advanced by National Grid in the regional system planning process to construct any such transmission improvements, provided that MMWEC and WRC determine that the proposed improvements are cost effective (without regard to CTRs) and will mitigate or alleviate the import constraints.

# III.13.7.3.4. Forward Capacity Market Net Charge Amount.

The Forward Capacity Market net charge amount for each Market Participant as of the end of the Obligation Month shall be equal to the sum of: (a) its Capacity Load Obligation charge; (b) its revenues from any applicable specifically allocated CTRs; (c) its share of the CTR fund; and (d) any applicable export charges.

# **SECTION III**

# MARKET RULE 1

# APPENDIX E1

# DEMAND RESPONSE

Appendix E1 applies to Capacity Commitment Periods commencing prior to June 1, 2017.

# APPENDIX E1

# **DEMAND RESPONSE**

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# Appendix E1 applies to Capacity Commitment Periods commencing prior to June 1, 2017.

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# APPENDIX E<u>1</u> DEMAND RESPONSE

# 1. Demand Response Registration

4. Appendix E1 applies to Capacity Commitment Periods commencing prior to June 1, 2017.

A Market Participant may register a Real-Time Demand Response Asset associated with a Real-Time Demand Response Resource for purposes of submitting Demand Reduction Offers on a Day-Ahead and Real-Time basis to provide demand reductions during hours ending 0800 through 1800 on non-Demand Response Holiday weekdays subject to the following conditions:

- (a) the asset is able to produce at least 100 kW of demand reduction, and;
- (b) the metering and communication equipment associated with the asset meets the requirements specified in Section III.E1.2.

A Real-Time Demand Response Asset may consist of an aggregation of multiple end-use metered customers.

# 1.1 Registration Parameters

During the registration process, Market Participants must submit the following information for each Real-Time Demand Response Asset:

- (a) Maximum Interruptible Capacity;
- (b) Maximum Load, and;
- (c) Maximum Generation, for Real-Time Demand Response Assets that are comprised of Distributed Generation.

#### 1.2 Restrictions on Real-Time Demand Response Asset Registration

A Market Participant may not register and must retire if previously registered a Real-Time Demand Response Asset that is comprised of:

- (a) the customers of Host Utilities that distributed more than 4 million MWh in the previous fiscal year, if the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into the ISO-administered markets or programs, or;
- (b) the customers of Host Utilities that distributed 4 million MWh or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers' demand response to be bid into the ISO-administered markets or programs.

A Market Participant may not register an existing Generator Asset as a Real-Time Demand Response Asset for the purpose of submitting Demand Reduction Offers.

# 2. Metering and Communication

# 2.1 Interval Metering and Telemetry Requirements

The actual metered demand of each individual end-use customer facility that comprises a Real-Time Demand Response Asset must be measured using interval meters located at the individual end-use customer's retail delivery point and shall be reported to the ISO at an interval of five minutes. Actual metered demand submitted to the ISO shall not include average avoided peak distribution losses. Each generator located behind an individual end-use customer's retail delivery point shall be separately measured using an interval meter and shall be reported to the ISO at an interval of five minutes.

Interval meters required pursuant to Section III.E1.2.1 must meet the following requirements:

- (a) the interval meter must record and report meter data to the ISO in Real-Time at an interval of fiveminutes or less;
- (b) if the interval meter is the same meter used by the distribution company for billing purposes, the meter is a revenue-quality meter that is accurate within  $\pm$  0.5%, and;
- (c) if the interval meter is not the same meter used by the distribution company for billing purposes, the interval meter is either a revenue-quality meter that is accurate within  $\pm 0.5\%$  or a non-revenue-

quality meter with an overall accuracy of  $\pm$  2.0%. For each non-revenue-quality meter used, the Market Participant must, during the registration process, submit certification from the meter manufacturer that the interval meter being used meets the  $\pm$  2.0% accuracy threshold, and shall specify accuracy for the following parameters:

- i. current measurement;
- ii. voltage measurement;
- iii. A/D conversion, and;
- iv. calibration.

# 2.2 Meter Testing

All interval meters must be periodically tested and calibrated.

Market Participants must conduct periodic meter data validation checks.

Market Participants must repair or replace meters that are found to be inaccurate pursuant to periodic testing and data validation checks.

Market Participants must perform an annual independent certification of the accuracy and precision of the meters and meter data communication systems.

# 2.3 Auditing

The ISO may, for a Real-Time Demand Response Asset, review and audit testing and calibration records, audit facility performance (including review of facility equipment), order and witness the testing of metering and measurement equipment, and witness the demand reduction activities of any facility associated with the asset.

Market Participants must make retail billing meter data from the Host Participant for the facilities associated with a Real-Time Demand Response Asset available to the ISO upon request.

Market Participants are responsible for all expenses associated with installing, maintaining, calibrating, testing, and certifying the metering, data recording and measurement equipment of Real-Time Demand Response Assets.

# 2.4 Communication/Telemetry

Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facilities comprising the Real-Time Demand Response Asset on the electricity network in the New England Control Area.

For Real-Time Demand Response Assets whose demand reductions are not achieved by Distributed Generation but where there is a generator located behind the retail delivery point, Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facility comprising the Real-Time Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of all generation.

For Real-Time Demand Response Assets whose demand reductions are achieved by Distributed Generation, Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facility comprising the Real-Time Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of Distributed Generation associated with the Real-Time Demand Response Asset.

#### 3. Demand Reduction Offers

# 3.1 Required Demand Reduction Offer Parameters

Market Participants must submit a Demand Reduction Offer for each Real-Time Demand Response Asset that meets the requirements of this section in order to be eligible for a demand reduction payment.

A Demand Reduction Offer must be equal to or greater than the Demand Reduction Threshold Price in effect on the day the Demand Reduction Offer is made.

Demand Reduction Offers reflect the amount of demand reduction offered at the retail delivery point excluding transmission and distribution losses.

A Demand Reduction Offer shall consist of a single offer price in \$/MWh (less than or equal to \$1000/MWh) and a single demand reduction amount (in MW to the nearest 0.1 MW) that shall apply to hours ending 0800 through 1800 in the Operating Day.

A Market Participant may submit a single Demand Reduction Offer for each of its Real-Time Demand Response Assets for each Operating Day that is a non-Demand Response Holiday weekday.

Demand Reduction Offers for the following Operating Day must be submitted by the offer submission deadline for the Day-Ahead Energy Market of the day before the Operating Day and may not be changed thereafter.

The minimum Demand Reduction Offer amount for each Real-Time Demand Response Asset is 100 kW.

The maximum Demand Reduction Offer amount for each Real-Time Demand Response Asset cannot exceed the asset's Maximum Interruptible Capacity.

# 3.2 Optional Demand Reduction Offer Parameters

A Demand Reduction Offer may specify a minimum interruption duration of one to four hours. If a Market Participant does not specify a minimum interruption duration in its Demand Reduction Offer, the minimum interruption duration shall be one hour.

A Demand Reduction Offer may specify a curtailment initiation price (in \$ per interruption). If a Market Participant does not specify a curtailment initiation price, the curtailment initiation price shall be \$0.

A Demand Reduction Offer must meet the following minimum and maximum price requirements:

- (a) The offer price not including the curtailment initiation price shall be greater than or equal to the Demand Reduction Threshold Price; and
- (b) The offer cost of the Demand Reduction Offer, which shall include the curtailment initiation price, shall be less than or equal to \$1000/MWh. The offer cost shall be computed as follows: offer cost = offer price + [curtailment initiation price/(minimum interruption duration x bid amount (MW))].

# 4. Day-Ahead Clearing, Scheduling and Notification

Demand Reduction Offers are cleared after the Day-Ahead Energy Market results are determined.

Demand Reduction Offers are cleared by comparing the Demand Reduction Offer to the hourly Day-Ahead LMPs for the Load Zone in which the Real-Time Demand Response Asset is located. A Demand Reduction Offer associated with a Real-Time Demand Response Asset will clear in one or more hours of the Operating Day if the sum of the hourly Day-Ahead LMP times the Demand Reduction Offer amount in the cleared hours of the Operating Day is greater than or equal to the sum of the curtailment initiation price for the Operating Day and the sum of the Demand Reduction Offer price times the Demand Reduction Offer amount in the cleared hours of the Operating Day.

The ISO will provide Market Participants with demand curtailment schedules for Real-Time Demand Response Assets based on cleared Demand Reduction Offers.

The demand curtailment schedule shall reflect demand reductions (MW) at the Real-Time Demand Response Asset's retail delivery point.

#### 5. Real-Time Scheduling of Demand Reductions

A Demand Reduction Offer shall continue to apply in Real-Time during the Operating Day even if the Demand Reduction Offer is not scheduled Day-Ahead for the next Operating Day pursuant to Section III.E1.4. If a Market Participant's Demand Reduction Offer is not cleared Day-Ahead to reduce demand in an hourly time interval for the next Operating Day, the Market Participant may initiate a Real-Time demand reduction by reducing demand when the offer price (not including the curtailment initiation price) is less than or equal to the provisional hourly Real-Time LMP published in the Operating Day for the Load Zone in which a Real-Time Demand Response Asset is located.

A Market Participant will not receive a Dispatch Instruction in Real-Time for a Real-Time Demand Response Asset.

# 5.1 Requirements for Demand Reductions of 5 MW and Above

A Market Participant with a Real-Time Demand Response Asset that has submitted a Demand Reduction Offer for the Operating Day, must request permission from the ISO prior to reducing demand in an amount greater than or equal to 5 MW during a 60 minute period, unless the asset was dispatched or audited pursuant to Section III.13. Permission must be requested not less than 15 minutes and not greater than 60 minutes before the start of the demand reduction. The ISO may approve or deny the requested interruption based on the impact of the interruption on system reliability.

# 6. Determination of the Demand Reduction Threshold Price

The Demand Reduction Threshold Price for each month shall be determined through an analysis of a smoothed supply curve for the month. The smoothed supply curve shall be derived from real-time generator and import offer data for the same month of the previous year. The ISO may adjust the offer data to account for significant changes in generator and import availability or other significant changes to the historic supply curve. The historic supply curve shall be calculated as follows:

- Each generator and import offer block (i.e., each price-quantity pair offered in the Real-Time
  Energy Market) for each day of the month shall be compiled and sorted in ascending order of price
  to create an unsmoothed supply curve.
- ii. An unsmoothed supply curve for the month shall be formed from the price and cumulative quantity of each offer block.
- iii. A non-linear regression shall be performed on a sampled portion of the unsmoothed supply curve to produce an increasing, convex, smooth approximation of the supply curve.
- iv. A historic threshold price  $P_{th}$  shall be determined as the point on the smoothed supply curve beyond which the benefit to load from the reduced LMP resulting from demand response exceeds the cost to load associated with compensating demand response.
- v. The Demand Reduction Threshold Price for the upcoming month shall be determined by the following formula:

$$DRTP = P_{th} \times \frac{FPI_c}{FPI_h}$$

where  $FPI_h$  is the historic fuel price index for the same month of the previous year, and  $FPI_c$  is the fuel price index for the current month.

The historic and current fuel price indices used to establish the Demand Reduction Threshold Price for a month shall be based on the lesser of the monthly natural gas or heating oil fuel indices applicable to the New England Control Area, as calculated three business days before the start of the month preceding the Demand Reduction Threshold Price's effective date.

The ISO will post the resulting Demand Reduction Threshold Price, along with the index-based fuel price values used in establishing the Demand Reduction Threshold Price, on its website by the 15<sup>th</sup> day of the preceding month in advance of the Demand Reduction Threshold Price's effective date.

The Demand Reduction Threshold Price shall apply to all Demand Reduction Offers associated with Real-Time Demand Response Assets located anywhere within the New England Control Area.

# 7. Demand Response Baselines

A Market Participant must establish a Demand Response Baseline pursuant to Section III.8<u>A</u> prior to submitting a Demand Reduction Offer for a Real-Time Demand Response Asset.

A Market Participant shall take no actions to establish a Demand Response Baseline or affect a Demand Response Baseline adjustment that results in a Demand Response Baseline that exceeds the expected electricity consumption levels of its end-use metered customers absent demand reduction payments.

For Real-Time Demand Response Assets comprised of Distributed Generation, a Market Participant shall take no actions to establish a Demand Response Baseline that results in a Demand Response Baseline that reduces the expected output levels of its generation absent demand reduction payments.

#### 8. Real-Time Demand Reduction Obligations

#### 8.1 Real-Time Demand Reduction of Assets Without Generation

The Real-Time demand reduction amount of a Real-Time Demand Response Asset is equal to the difference between its Demand Response Baseline adjusted pursuant to Section III.8<u>A</u>.4 and the asset's Real-Time metered demand, during the intervals that the Real-Time Demand Response Asset was scheduled Day-Ahead by the ISO to reduce demand or was otherwise eligible to receive payment for a demand reduction in Real-Time. A Real-Time Demand Response Asset's Real-Time demand reduction amount is negative if the asset's Real-Time metered demand is greater than its adjusted Demand Response Baseline.

#### 8.2 Real-Time Demand Reduction of Assets With Generation

To the extent a generator is located behind the retail delivery point of an individual end-use customer facility that comprises a Real-Time Demand Response Asset, the metered output of the generator in each five-minute interval shall be added to the metered demand measured at the retail delivery point in the same intervals to determine the Real-Time Demand Response Asset's Demand Response Baseline. The Real-Time demand reduction amount achieved by the individual end-use customer facility that comprises a Real-Time Demand Response Asset shall be equal to the asset's adjusted Demand Response Baseline in each five-minute interval minus the sum of the metered demand measured at the retail delivery point and the output of all of the generators located behind the Real-Time Demand Response Asset's retail delivery point in the same time intervals. A Real-Time Demand Response Asset's Real-Time demand reduction amount is negative if the sum of the asset's Real-Time metered demand and the output of all of the generators is greater than its adjusted Demand Response Baseline.

If a Real-Time Demand Response Asset is comprised of a Distributed Generation asset located behind the retail delivery point of an individual end-use customer facility, the interval metered output of the Real-Time Demand Response Asset comprised of the Distributed Generation asset shall be used to determine its Demand Response Baseline. The Real-Time demand reduction amount achieved by the Real-Time Demand Response Asset comprised of the Distributed Generation asset shall be equal to the asset's incremental output in each five-minute interval relative to its Demand Response Baseline in the same intervals. A Real-Time Demand Response Asset's Real-Time demand reduction amount is negative if the asset's Real-Time metered output is less than its Demand Response Baseline.

#### 8.3 Treatment of Net Supply

If the metered amount measured at the retail delivery point reflects net energy supply during intervals in which Real-Time Demand Response Assets and/or Real-Time Emergency Generation Assets behind the retail delivery point had positive Real-Time demand reductions, then the amount of net energy supplied in an interval with a positive Real-Time demand reduction shall be subtracted from the Real-Time demand reduction amount in the same interval of each Real-Time Demand Response Asset and/or Real-Time Emergency Generation Asset behind that retail delivery point on a *pro rata* basis. The adjustment for net energy supply shall not result in a negative Real-Time demand reduction amount.

## 8.4 Real-Time Demand Reduction Obligations

The Real-Time Demand Reduction Obligation of a Real-Time Demand Response Asset is equal to its Real-Time demand reduction amount adjusted for net supply (limited to 200% of the associated Demand Reduction Offer amount) multiplied by one plus the percent average avoided peak distribution losses.

#### 9. Settlement

## 9.1 Day-Ahead Settlement

A Market Participant with a Real-Time Demand Response Asset will be paid for its Day-Ahead Demand – Reduction Obligation multiplied by the Day-Ahead LMP for the Load Zone within which the Real-Time Demand Response Asset is located.

#### 9.2 Real-Time Settlement

### 9.2.1. Real-Time Demand Response Assets with Cleared Demand Reduction Offers

A Market Participant with a Real-Time Demand Response Asset will be paid or charged for the difference between its Real-Time Demand Reduction Obligation and its Day-Ahead Demand Reduction Obligation multiplied by the final hourly Real-Time LMP for the Load Zone within which the Real-Time Demand Response Asset is located. The payment for the amount by which the Real-Time Demand Reduction

Obligation exceeds the Day-Ahead Demand Reduction Obligation in an hour shall be set to zero if the provisional Real-Time LMP for that hour is less than the Demand Reduction Threshold Price.

A Market Participant will not be charged for the difference between its Real-Time Demand Reduction Obligation and its Day-Ahead Demand Reduction Obligation for which a demand reduction request is denied pursuant to Section III.E1.5.1.

#### 9.2.2. Real-Time Demand Response Assets without Cleared Demand Reduction Offers

If the Demand Reduction Offer price (not including the curtailment initiation price) is less than or equal to the provisional hourly Real-Time LMP published in the Operating Day for the Load Zone in which the Real-Time Demand Response Asset is located, the Market Participant will be paid the final hourly Real-Time LMP multiplied by its Real-Time Demand Reduction Obligation.

A Market Participant will not be charged pursuant to Section III.E1.9.2.2 if:

- (a) a Demand Reduction Offer does not clear Day-Ahead pursuant to Section III.E1.4, and;
- (b) the Real-Time Demand Response Asset produces a negative Real-Time demand reduction amount.

A Market Participant will not be paid for a Real-Time Demand Reduction Obligation for which a demand reduction request is denied pursuant to Section III.E1.5.1.

#### 9.3 Cost Allocation

Payments and charges pursuant to this section will be allocated on an hourly basis proportionally to Market Participants with Real-Time Load Obligation, excluding Real-Time Load Obligation incurred at all External Nodes or incurred by Dispatchable Asset Related Demand Postured by the ISO, on a systemwide basis.

### 10. Average Distribution Losses

For purposes of Section III.E1, the percent average avoided peak distribution losses shall be the percent average avoided peak transmission and distribution losses used for the associated Capacity Commitment Period in the Forward Capacity Market less the percent average avoided peak transmission system losses.

## **SECTION III**

## MARKET RULE 1

# APPENDIX E2

# **DEMAND RESPONSE**

Appendix E2 applies to Capacity Commitment Periods commencing on or after June 1, 2017.

# APPENDIX E2

## **DEMAND RESPONSE**

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# APPENDIX E<u>2</u> DEMAND RESPONSE

Appendix E2 applies to Capacity Commitment Periods commencing on or after June 1, 2017.

### 1. Demand Response Registration

### 1.1 Demand Response Resource Registration

A Market Participant may register a Demand Response Resource for purposes of submitting Demand Reduction Offers on a Day-Ahead and Real-Time basis for non-ISO settlement holidays-subject to the following conditions:

- (a) each Demand Response Resource must be a single Demand Response Asset or an aggregation of Demand Response Assets located within the same Dispatch Zone;
- (b) each Demand Response Resource must be able to produce at least 100 kW of demand reduction, and;
- (c) the Market Participant must comply with ISO required auditing and testing requirements.

A Market Participant may not register a Real-Time Emergency Generation Resource, an On-Peak Demand Resource, a Seasonal Peak Demand Resource or a Dispatchable Asset Related Demand to participate as a Demand Response Resource in the Day-Ahead Energy Market or Real-Time Energy Market. A Market Participant may not register an existing Generator Asset as a Demand Response Asset for the purpose of submitting Demand Reduction Offers.

### 1.2 Demand Response Capacity Resource Registration

A Market Participant may register a Demand Response Capacity Resource subject to the following conditions:

(a) each Demand Response Capacity Resource must have mapped to it at least one Demand Response Resource within the same Dispatch Zone in order to comply with the energy market offer requirements in Section III.13.6.1.5; and

(b) a Demand Response Resource cannot be mapped to a Demand Response Capacity Resource, or maintain the mapping to a Demand Response Capacity Resource, if the Demand Response Resource violates the mapping provisions in Section III.E2.1.4(c).

## 1.3 Demand Response Asset Registration

A Market Participant may register a Demand Response Asset subject to the following conditions:

- (a) Unless it meets the conditions for aggregation in sub-section (b) below, a Demand Response Asset must have a defined, single retail\_Retail\_delivery\_Delivery\_point\_Point\_and be registered at a single Node. For each Demand Response Aset capable of delivering Net Supply, a single Net Supply Generator Asset may be registered at the same Node as the Demand Response Asset unless the asset meets the conditions for aggregation in sub-section (b) below.
- (b) A Demand Response Asset may be the aggregate consumption of multiple end-use customers from multiple delivery points within a single Dispatch Zone if (i) the demand reduction from each retail-Retail delivery Delivery point Point in the aggregation is less than 10 kW, and (ii) the demand at the multiple retail-Retail delivery Delivery points Points satisfy the criteria for a homogenous population. A Demand Response Asset that meets these conditions for aggregation must be registered at the Dispatch Zone rather than the Node. For each Demand Response Asset capable of delivering Net Supply that meets the conditions for aggregation as described in this sub-section, a single Net Supply Generator Asset may be registered at the same Dispatch Zone as the Demand Response Asset,
- (c) No more than one Demand Response Asset may be located at a single retail delivery <u>Delivery pointPoint</u>.
- (d) Each Demand Response Asset must be mapped to a Demand Response Resource.
- (e) Each Demand Response Asset must be able to produce at least 10 kW of demand reduction.
- (f) A Demand Response Asset with a registered Maximum Interruptible Capacity equal to or greater than 5 MW from the same retail\_Retail\_delivery\_Delivery\_point\_Point\_must be registered as a single Demand Response Resource at a Node. A Demand Response Asset capable of delivering Net Supply where the sum of its Maximum Interruptible Capacity and Maximum Net Supply from the same Retail Delivery Point is equal to or greater than 5 MW must register as a single Demand Response Resource at a Node and may register a single Net Supply Generator Asset at

<u>Asset has have participated</u> in a seasonal audit, the evaluation of whether <u>Demand Response</u>

<u>Asset's its-Maximum Interruptible Capacity or the sum of the Maximum Interruptible Capacity and Net Supply is equal to or greater than 5 MW shall account for the most recent seasonal audit results for the assets.</u>

(g) The metering and communication equipment associated with each Demand Response Asset must meet the requirements in Section III.E2.2.

During the registration process, Market Participants must submit the following for each Demand Response Asset:

- (a) Maximum Interruptible Capacity;
- (b) Maximum Load;
- (c) Maximum Generation, for Demand Response Resources Assets that are comprised of Distributed Generation, and;
- (e) For any Net Supply Generator Asset associated with a Demand Response Asset, the Maximum Net Supply; and
- (d) retail account number and meter number for the end-use customer.

### 1.4 Restrictions on Demand Response Resource Registration

A Market Participant may not register and must retire if previously registered a Demand Response Resource that is comprised of:

- (a) the customers of Host Utilities that distributed more than 4 million MWh in the previous fiscal year, if the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into the ISO-administered markets or programs, or;
- (b) the customers of Host Utilities that distributed 4 million MWh or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers' demand response to be bid into the ISO-administered markets or programs.
- (c) The Maximum Interruptible Capacity adjusted for the Audited Demand Reduction of each Demand Response Resource registered by a Market Participant within a single Dispatch Zone must be at least 1 MW before the Market Participant registers a new Demand Response Resource within that same Dispatch Zone. This restriction shall not apply if either:

- (i) all Demand Response Assets registered by the Market Participant in the Dispatch Zone are mapped to a Demand Response Resource mapped to a Demand Response Capacity Resource and the Market Participant wants to register a Demand Response Resource that is not mapped to a Demand Response Capacity Resource; or
- (ii) all Demand Response Assets registered by the Market Participant in the Dispatch Zone are mapped to a Demand Response Resource not mapped to a Demand Response Capacity Resource and the Market Participant wants to register a Demand Response Resource that is mapped to a Demand Response Capacity Resource.
- (d) In the event the Audited Demand Reductions of two or more Demand Response Resources registered by a Market Participant within a single Dispatch Zone are less than 1 MW following an audit, Demand Response Asset mapping for that Market Participant shall be adjusted if doing so decreases the number of Demand Response Resources within that Dispatch Zone.

### 1.5 Restrictions on Demand Response Asset Mapping

Demand Response Assets may be un-mapped from a Demand Response Resource for re-mapping to another Demand Response Resource, or un-mapped without re-mapping, subject to the following conditions:

- (a) A Demand Response Asset cannot be unmapped from a Demand Response Resource that is mapped to a Demand Response Capacity Resource if, following the un-mapping, the sum of the demand reductions of the remaining Demand Response Assets that are associated with the Demand Response Capacity Resource, as reflected in the most recent seasonal audit for that resource, would be lower than the resource's highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period.
- (b) When a Demand Response Asset can be mapped to more than one Demand Response Resource that is mapped to a Demand Response Capacity Resource, a Demand Response Asset shall be mapped to a Demand Response Resource associated with a Demand Response Capacity Resource whose demand reduction capability is less that the lower of (i) its commercial capacity, as reflected in the resource's highest audit value or (ii) its highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period before being mapped to a Demand Response Resource associated with a non-commercial Demand Response Capacity Resource or non-commercial increment of a Demand Response Capacity Resource.

- (c) A Demand Response Asset may be re-mapped to another Demand Response Resource only if the Audited Full Reduction Time of the asset's new Demand Response Resource, adjusted for the Audited Demand Reduction of the asset's current Demand Response Resource, is equal to or greater than the Audited Full Reduction Time of the Demand Response Resource from which the Demand Response Asset is being un-mapped.
- (d) If a Demand Response Asset is re-mapped to a Demand Response Resource, and the Audited Full Reduction Time of the Demand Response Resource to which the asset is being mapped, adjusted for the Audited Demand Reduction of the Demand Response Resource from which the asset is being mapped, is less than the Audited Full Reduction Time of the Demand Response Resource from which the asset is being mapped, the Demand Response Asset audit value will be set to zero.

#### 2. Metering and Communication

### 2.1 Interval Metering and Telemetry Requirements

The metered demand of each individual end-use customer facility that comprises a Demand Response Asset must be measured using interval meters located at the individual end-use customer's retail-Retail delivery Delivery point Point and shall be reported to the ISO at an interval of five minutes. Metered demand data submitted to the ISO shall not include average avoided peak distribution losses. Each generator located behind an individual end-use customer's retail-Retail delivery Delivery point-Point shall be separately measured using an interval meter and shall be reported to the ISO at an interval of five minutes.

The interval meters required pursuant to Section III.E2.2.1 must meet the following requirements:

- (a) The interval meter must record and report meter data to the ISO in Real-Time at an interval of five-minutes or less;
- (b) If the interval meter is the same meter used by the distribution company for billing purposes, the meter is a revenue-quality meter that is accurate within  $\pm$  0.5%; and
- (c) If the interval meter is not the same meter used by the distribution company for billing purposes, the interval meter is either a revenue-quality meter that is accurate within  $\pm$  0.5% or a non-revenue-quality meter with an overall accuracy of  $\pm$  2.0%. For each non-revenue-quality meter used, the Market Participant must, during the registration process, submit certification from the

meter manufacturer that the interval meter being used meets the  $\pm$  2.0% accuracy threshold, and shall specify accuracy for the following parameters:

- i. current measurement:
- ii. voltage measurement;
- iii. A/D conversion; and
- iv. calibration.

## 2.2 Communication/Telemetry

The Market Participant must utilize a remote terminal unit for communicating telemetry and receiving dispatch instructions from the ISO.

Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facilities that comprise the Demand Response Asset on the electricity network in the New England Control Area.

For Demand Response Assets whose demand reductions are not achieved by Distributed Generation but where there is a generator located behind the retail\_Retail\_delivery\_Delivery\_pointPoint, Market Participants must submit a single set of interval meter data representing the metered demand of the enduse facility that comprises the Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of all generation.

For Demand Response Assets whose demand reductions are achieved by Distributed Generation, Market Participants must submit a single set of interval meter data representing the metered demand of the enduse facility that comprises the Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of Distributed Generation associated with the Demand Response Asset.

#### 2.3 Meter Testing

All interval meters must be periodically tested and calibrated.

Market Participants must conduct periodic meter data validation checks.

Market Participants must repair or replace meters that are found to be inaccurate pursuant to periodic testing and data validation checks.

Market Participants must perform an annual independent certification of the accuracy and precision of the meters and meter data communication systems.

### 2.4 Auditing

The ISO may, for Demand Response Resources, review and audit testing and calibration records, audit facility performance (including review of facility equipment), order and witness the testing of metering and measurement equipment, and witness the demand reduction activities of any facility associated with a Demand Response Asset.

Market Participants must make retail billing meter data from the Host Participant for the facilities associated with a Demand Response Asset available to the ISO upon request.

Market Participants are responsible for all expenses associated with installing, maintaining, calibrating, testing and certifying the metering, data recording and measurement equipment of Demand Response Assets.

## 3. Day-Ahead Energy Market Demand Reduction Offers

Market Participants must submit a Demand Reduction Offer for each Demand Response Resource that meets the requirements of this section in order to be eligible for a demand reduction payment.

The Market Participant's Demand Reduction Offer for a Demand Response Resource must satisfy the following conditions:

- (a) Demand Reduction Offers must be submitted by the offer submission deadline for the Day-Ahead Energy Market of the day before the applicable Operating Day.
- (b) The Market Participant can submit up to 10 monotonically increasing price/demand reduction amount pairs for each Operating Day. The demand reduction amount shall not include an adjustment for average avoided peak transmission and distribution losses.
- (c) The minimum amount for each price/demand reduction amount pair of a Demand Reduction Offer is 100 kW.

- (d) The sum of all price/demand reduction amount pairs for a Demand Reduction Offer cannot exceed the sum of the Maximum Interruptible Capacities of the resource's Demand Response Assets.
- (e) The minimum Demand Reduction Offer price must be equal to or greater than the Demand Reduction Threshold Price in effect for the day the Demand Reduction Offer is submitted.
- (f) The maximum Demand Reduction Offer price must be less than or equal to \$1000/MWh.

Market Participants may not Self-Schedule interruptions in the Day-Ahead Energy Market.

### 3.1 Required Demand Reduction Offer Parameters

The Market Participant shall provide the following hourly values in its Demand Reduction Offer. The Market Participant shall maintain up-to-date values for each of these parameters prior to and throughout the Operating Day:

- (a) Available or Unavailable;
- (b) Minimum Reduction (MW), and;
- (c) Maximum Reduction (MW).

## 3.2 Optional Demand Reduction Offer Parameters

The Market Participant may also specify the following in its Demand Reduction Offer:

- (a) Interruption Cost (\$)
- (b) Minimum Reduction Time (Hrs)
- (c) Minimum Time Between Reductions (Hrs)
- (d) Demand Response Resource Start-Uup Time (Hrs)
- (e) Demand Response Resource Notification Time (Hrs)
- (f) Demand Response Resource Ramp Rate (MW/min)

### 4. Real-Time Energy Market Demand Reduction Offers

During the reRe-offer Offer periodPeriod, Market Participants may submit revisions to the price or demand reduction amount parameters of a Demand Reduction Offer. Demand Response Resources scheduled subsequent to the closing of the reRe-offer Offer period Period shall be settled at the applicable Real-Time Prices.

Revisions to Demand Reduction Offers during the <u>reRe-offer-Offer period-Period</u> are subject to the following conditions that apply to Day-Ahead Demand Reduction Offers under Section III.E2.3: limitation to 10 monotonically increasing price/demand reduction amount pairs, minimum amount, maximum amount, minimum price and maximum price.

A Demand Reduction Offer shall continue to apply in Real-Time during the Operating Day even if the Demand Reduction Offer is not scheduled Day-Ahead for that Operating Day pursuant to Section III.E2.5 or modified during the <u>reRe-offer-Offer periodPeriod</u>.

No changes will be allowed to the Demand Reduction Offer after the close of the reRe-offer Offer periodPeriod. Market Participants may not Self-Schedule interruptions in the Real-Time Energy Market.

## 5. Scheduling and Dispatching

The ISO shall schedule in the Day-Ahead Energy Market and commit and dispatch in the Real-Time Energy Market the Demand Response Resource based on:

- (a) least-cost, security-constrained dispatch and commitment as specified in Section III.1.7.6(a); and
- (b) the Demand Reduction Offer for the Demand Response Resource, with demand reduction amounts adjusted by average avoided peak distribution losses.

At the conclusion of the Day-Ahead Energy Market clearing, the ISO will provide Market Participants with Day-Ahead demand reduction schedules for Demand Response Resources reflecting demand reduction amounts that do not include average avoided peak transmission and distribution losses for each hour of the following Operating Day.

During the Operating Day, the ISO will issue Dispatch Instructions to the Market Participant specifying the expected demand reduction amount that does not include average avoided peak transmission and distribution losses from their Demand Response Resource and the Dispatch Rate.

A Market Participant must notify the ISO, as soon as practicable, of a facility shutdown or equipment outage (including partial outages) that reduces the Demand Response Resource's ability to achieve the

demand reduction reflected in the Demand Reduction Offer for an Operating Day. Net Supply Generator

Assets will be dispatched at the same Location as the Demand Response Resource with which they are

associated.

### 6. Determination of the Demand Reduction Threshold Price

The Demand Reduction Threshold Price for each month shall be determined through an analysis of a smoothed supply curve for the month. The smoothed supply curve shall be derived from real-time generator and import offer data for the same month of the previous year. The ISO may adjust the offer data to account for significant changes in generator and import availability or other significant changes to the historic supply curve. The historic supply curve shall be calculated as follows:

- (a) Each generator and import offer block (i.e., each price-quantity pair offered in the Real-Time Energy Market) for each day of the month shall be compiled and sorted in ascending order of price to create an unsmoothed supply curve.
- (b) An unsmoothed supply curve for the month shall be formed from the price and cumulative quantity of each offer block.
- (c) A non-linear regression shall be performed on a sampled portion of the unsmoothed supply curve to produce an increasing, convex, smooth approximation of the supply curve.
- (d) A historic threshold price  $P_{th}$  shall be determined as the point on the smoothed supply curve beyond which the benefit to load from the reduced LMP resulting from demand response exceeds the cost to load associated with compensating demand response.
- (e) The Demand Reduction Threshold Price for the upcoming month shall be determined by the following formula:

where  $FPI_h$  is the Forward Reserve Fuel Indexhistoric fuel price index for the same month of the previous year, and  $FPI_c$  is the Forward Reserve Fuel Indexfuel price index for the current month.

The historic and current fuel price indices used to establish the Demand Reduction Threshold

Price for a month shall be based on the lesser of the monthly natural gas or heating oil fuel

indices applicable to the New England Control Area, as calculated three business days before the
start of the month preceding the Demand Reduction Threshold Price's effective date.

The ISO will post the resulting Demand Reduction Threshold Price, along with the index-based fuel price values used in establishing the Demand Reduction Threshold Price, on its website by the 15<sup>th</sup> day of the preceding month in advance of the Demand Reduction Threshold Price's effective date.

The Demand Reduction Threshold Price shall apply to all Demand Reduction Offers associated with Demand Response Resources located anywhere within the New England Control Area.

## 7. Real-Time Demand Reduction Obligation

A Demand Response Resource's Real-Time Demand Reduction Obligation will be calculated for each dispatch interval in which the Demand Response Resource receives a Dispatch Instruction to reduce demand.

## 7.1 Real-Time Demand Reductions

The Real-Time demand reduction in a dispatch interval is the difference between the adjusted Demand Response Baseline <u>further adjusted for any metered output for a Real-Time Emergency Generation Asset located at the same Retail Delivery Point</u> and the metered demand for each Demand Response Asset associated with the Demand Response Resource.

If a Market Participant receives a Dispatch Instruction for a Demand Response Resource to reduce demand in a dispatch interval by zero MW, then in calculating the Real-Time Demand Reduction Obligation of the Demand Response Resource the Real-Time demand reductions of the Demand Response Assets comprising the resource shall be equal to zero for that dispatch interval.

#### 7.2 Real-Time Demand Reduction Obligations

The Real-Time Demand Reduction Obligation of a Demand Response Resource is the sum of the hourly integrated Real-Time demand reduction amounts of the Demand Response Assets comprising the Demand Response Resource, multiplied by one plus the percent average avoided peak distribution losses. In calculating the Real-Time Demand Reduction Obligation of a Demand Response Resource, the Real-

Time demand reduction amounts of the Demand Response Assets comprising the resource shall be adjusted for net supply as specified in Section III.E2.7.3 below.

If a Market Participant fails to comply with the metering and communication requirements in Section III.E2.2 for a Demand Response Resource for any period of time, then the Real-Time Demand Reduction Obligation shall be zero for that period of time.

## 7.3 Treatment of Net Supply

If a Demand Response Asset's metered demand represents a net supply of energy to the electrical gridNet Supply, the Demand Response Asset's metered demand in the interval will be set equal to zero and that value will be used in establishing the Real-Time Demand Reduction Obligation.

To the extent a Real Time Emergency Generation Asset is located behind the retail delivery point of an individual end use customer facility that comprises a Demand Response Asset and the Real Time Emergency Generation Resource associated with the Real Time Emergency Generation Asset is dispatched or audited pursuant to Section III.13, the metered output of the Real Time Emergency Generation Asset, in each five minute interval, shall be added to the metered demand measured at the retail delivery point in the same intervals for purposes of determining:

- (a) a Demand Response Asset's Demand Response Baseline, and;
- (b) the Real Time demand reduction achieved by the individual end-use customer facility that comprises the Demand Response Asset.

#### 8. Demand Response Resource Baseline

A Market Participant must establish a Demand Response Baseline pursuant to Section III.8 prior to submitting a Demand Reduction Offer for a Demand Response Resource.

A Market Participant shall not take actions to create or maintain a Demand Response Baseline that exceeds the expected electricity consumption levels of its end-use metered customers in the absence of demand reduction payments.

#### 9. Energy Market Settlement

#### 9.1 Day-Ahead Settlement

A Market Participant with a Demand Response Resource will be paid for its Day-Ahead Demand Reduction Obligation multiplied by the Day-Ahead LMP for the Dispatch Zone or Node at which the resource is registered.

#### 9.2 Real-Time Settlement

A Market Participant with a Demand Response Resource will be paid or charged for the difference between its Real-Time Demand Reduction Obligation and its Day-Ahead Demand Reduction Obligation multiplied by the hourly Real-Time LMP for the Dispatch Zone or Node at which the resource is registered.

#### 9.3 Cost Allocation

Charges or payments resulting from Real-Time demand reductions produced by Demand Response Resources or Real-Time Emergency Generation Resources shall be allocated on an hourly basis proportionally to Real-Time Load Obligation, excluding the Real-Time Load Obligation incurred at all External Nodes, and excluding Real-Time Load Obligation incurred by Dispatchable Asset Related Demand Postured by the ISO, on a system-wide basis.

## 9.4 NCPC Credits and Charges

A Market Participant with a Demand Response Resource is eligible for NCPC credits if the resource is following Dispatch Instructions. A Market Participant with a Demand Response Resource is ineligible for NCPC credits and may be assessed NCPC charges if the resource is not operating within the acceptable dispatch tolerance. A resource is not operating within the acceptable dispatch tolerance if in any five-minute interval for an hour the resource is not operating within 10% above or below the resource's Dispatch Instruction, except that a Market Participant with a resource that is not operating within the acceptable dispatch tolerance will not be assessed NCPC charges if during the entire hour the resource operates within 5% above or below the resource's Dispatch Instruction.

### 10. Average Avoided Peak Distribution Losses

For purposes of Section III.E2, the percent average avoided peak distribution losses shall be the percent average avoided peak transmission and distribution losses used for the associated Capacity Commitment Period in the Forward Capacity Market less the percent average avoided peak transmission system losses.

### **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:

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

**Adjusted Audited Demand Reduction** is the Audited Demand Reduction of a Demand Response Resource adjusted in accordance with Section III.13.7.1.5.10.1.1.

**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.

**Administrative Sanctions** are defined in Section III.B.4.1.2 of Appendix B 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.

**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 Capacity Price Rule** is a rule potentially affecting Capacity Clearing Prices in a Forward Capacity Auction, as described in Section III.13.2.7.8 of Market Rule 1.

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

**Alternative Technologies Regulation Pilot Program** is the pilot described in Appendix J to Market Rule 1.

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.

**Annualized FCA Payment** is used to determine a resource's availability penalties and is calculated in accordance with Section III.13.7.2.7.1.2(b) of Market Rule 1.

**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.

**APR-1** means the first of three Alternative Capacity Price Rule mechanisms described in Section III.13.2.7.8.

**APR-2** means the second of three Alternative Capacity Price Rule mechanisms described in Section III.13.2.7.8.

**APR-3** means the third of three Alternative Capacity Price Rule mechanisms described in Section III.13.2.7.8.

**Asset** is a generating unit, interruptible load, a component of a demand response resource or load asset.

**Asset Registration Process** is the ISO business process for registering a physical load, generator, or tieline for settlement purposes. The Asset Registration Process is posted on the ISO's website.

**Asset Related Demand** is a physical load that has been discretely modeled within the ISO's dispatch and settlement systems, settles at a Node and, except for pumped storage load, is made up of 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.

Asset Related Demand Bid Block-Hours are Block-Hours assigned to the Lead Market Participant for each Asset Related Demand bid. The daily bid Blocks in the price-based Real-Time bid will be multiplied by the number of hours in the day 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 risk-adjusted going forward costs of an asset that is part of an Existing Generating Capacity Resource, calculated for the asset in the same manner as the net-risk adjusted going forward costs of Existing Generating Capacity Resources as described in Section III.13.1.2.3.2.1.2.

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.

**Audited Demand Reduction** is the seasonal claimed capability of a Demand Response Resource as established pursuant to Section III.13.6.1.5.4.

**Audited Full Reduction Time** is the Offered Full Reduction Time associated with the Demand Response Resource's most recent audit.

**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 generating unit change its output while providing Regulation between the Regulation High Limit and Regulation Low Limit.

Average Hourly Load Reduction is either: (i) the sum of the 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; (ii) the sum of the 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; or (iii) in each Real-Time Demand Response Event Hour, the sum of the baseline electrical energy consumption less the sum of the actual electrical energy consumption of all of the Real-Time Demand Response Resource as registered with the ISO as of the first day of the month; or (iv) in each Real-Time Emergency Generation Event Hour, the sum of the baseline electrical energy consumption less the sum of the actual electrical energy consumption of all of the Real-Time Emergency Generation Assets associated with the Real-time Emergency Generation Resource as registered with the ISO as of the first day of the month. The Demand Resource's electrical energy reduction and Average Hourly Load Reduction shall be determined consistent with the Demand 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 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; (ii) the sum of the 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; or (iii) in each Real-Time Demand Response Event Hour or Real-Time Emergency Generation Event Hour, the sum of the electrical energy output of all of the Real-Time Demand Response Assets or Real-Time Emergency Generation Assets associated with the Real-Time Demand Response

Resource or Real-Time Emergency Generation Resource as registered with the ISO as of the first day of the month. Electrical energy output and Average Hourly Output shall be determined consistent with the Demand 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 Monthly PER is calculated in accordance with Section III.13.7.2.7.1.1.2(a) of Market Rule 1.

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.

**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.

**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 CIP Capital Payment** is the annual compensation level, as calculated pursuant to Section 5.1 utilizing data from Table 6 of Appendix A to this Schedule 16, or as referred to in Section 5.2, of Schedule 16 to the OATT, for a Blackstart Station's costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service.

**Blackstart CIP O&M Payment** is the annual compensation level, as calculated pursuant to Section 5.1 of Schedule 16 to the OATT, utilizing data from Table 6 of Appendix A to this Schedule 16, for a Blackstart Station's operating and maintenance costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of the provision 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 compensation, as calculated pursuant to Section 5.1 of Schedule 16 to the OATT, for a Designated Blackstart Resource's operating and maintenance costs associated with the provision of Blackstart Service (except for operating and maintenance costs associated with compliance with NERC Critical Infrastructure Protection Reliability Standards as part of Blackstart Service).

**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, which also encompasses "System Restoration and Planning Service" under the predecessor version of Schedule 16.

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 under a "Signature Page for Schedule 16 of the NEPOOL OATT" that was executed and in effect prior to January 1, 2013 for Category A Designated Blackstart Resources or a commitment to provide Blackstart Service established under Operating Procedure 11 – Designated Blackstart Resource Administration (OP11) for Category B Designated Blackstart Resources.

**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).

**Blackstart Station-specific Rate CIP Capital Payment** is a component of the Blackstart Station-specific Rate Payment that reflects a Blackstart Station's 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 the day); (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 (for Capacity Commitment Periods commencing on or after June 1, 2017, 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.

**Cancellation Fee** is defined in Section III.1.10.2(d).

Cancelled Start Credit is a credit calculated pursuant to Section III.F.2.5 of Appendix F to Market Rule 1 as the NCPC Credit due to each Market Participant for pool-scheduled generating Resources that were scheduled by the ISO to start after the close of the Day-Ahead Energy Market and that were cancelled by the ISO prior to their assigned commitment time.

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

Capability Year means a year's period beginning on June 1 and ending May 31.

**Capacity Acquiring Resource** is a resource that is seeking to acquire a Capacity Supply Obligation through a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1 of Market Rule 1.

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

**Capacity Carried Forward Due to Rationing** is described in Section III.13.2.7.8.2.1(c)(b)(ii) of Market Rule 1.

**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 Clearing Price Floor is described in Section III.13.2.7.

**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, equal to that Market Participant's Capacity Requirement (if any) adjusted to account for any relevant Capacity Load Obligation Bilaterals, as described in Section III.13.7.3.1 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 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** is defined in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**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 Requirement** is described in Section III.13.7.3.1 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-to-Service Ratio is defined in Section III.3.2.2(h) of Market Rule 1.

Capacity Transfer Right (CTR) is a financial right that entitles the holder to the difference in the Net Regional Clearing Prices between Capacity Zones for which the transfer right is defined, in the MW amount of the holder's entitlement.

**Capacity Transferring Resource** is a resource that has a Capacity Supply Obligation and is seeking to shed such obligation, or a portion thereof, through a Capacity Supply Obligation Bilateral, as described in Section III.13.5.1 of Market Rule 1.

**Capacity Value** is the value (in kW-month) of a Demand Resource for a month determined pursuant to Section III.13.7.1.5 of Market Rule 1.

**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.

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.

**Carried Forward Excess Capacity** is calculated as described in Section III.13.2.7.8.2.1(c) of Market Rule 1.

**Category A Designated Blackstart Resource** is a Designated Blackstart Resource that has committed to provide Blackstart Service under a "Signature Page for Schedule 16 of the NEPOOL OATT" that was executed and in effect prior to January 1, 2013 and has not been converted to a Category B Designated Blackstart Resource.

**Category B Designated Blackstart Resource** is a Designated Blackstart Resource that is not a Category A 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.

**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 power year, 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 in all Load Zones. Daily Coincident Peak Contribution values shall be submitted by the Assigned Meter Reader or Host Participant by the meter reading deadline to the ISO.

**Cold Weather Conditions** means any calendar day when that day's Effective Temperatures are forecast to be equal to or less than zero degrees Fahrenheit for any single on-peak hour and that day's total Effective Heating Degree Days are forecast to be greater than or equal to 65.

Cold Weather Event means days when Cold Weather Conditions are forecast to exist and the Seven-Day Forecast indicates a capacity margin less than or equal to 0 MW for an Operating Day. Cold Weather Events are declared by 1100 two days prior to the Operating Day. A Cold Weather Warning will be used for all future days within the Seven-Day Forecast when a capacity margin of less than or equal to 0 MW exists, until such time that the ISO declares a Cold Weather Event.

**Cold Weather Warning** means days when Cold Weather Conditions are forecast to exist and the Seven-Day Forecast indicates a capacity margin less than 1,000 MW. In addition, a Cold Weather Warning will be used for all future days within the Seven-Day Forecast when a capacity margin of less than or equal to 0 MW exists for days not yet declared as a Cold Weather Event.

**Cold Weather Watch** means days when Cold Weather Conditions are forecast to exist and the Seven-Day Forecast indicates a capacity margin greater than or equal to 1,000 MW.

**Commercial Capacity**, for the purposes of the ISO New England Financial Assurance Policy, is defined in Section VII.A of that policy.

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

**Common Costs** are those costs associated with a Station that are avoided only by (1) the clearing of the Static De-List Bids or the Permanent De-List Bids of all the Existing Generating Capacity Resources comprising the Station; or (2) the acceptance of a Non-Price Retirement Request of 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 Generating Capacity 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.

**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.

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 value that was determined by the ISO for each Forward Capacity Auction pursuant to the provisions of Section III.13 of Market Rule 1 in effect at the time of that auction.

**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, a performance or surety bond, or a combination thereof.

**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.

**Curtailment** 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.

**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)(iii) of Market Rule 1.

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

**Day-Ahead Demand Reduction Obligation** is a cleared Demand Reduction Offer multiplied by one plus the percent average avoided peak distribution losses. For Capacity Commitment Periods commencing on or after June 1, 2017, Day-Ahead Demand Reduction Obligation is the hourly demand reduction amounts of a Demand Response Resource scheduled by the ISO as a result of the Day-Ahead Energy Market, multiplied by one plus the percent average avoided peak distribution losses.

**Day-Ahead Energy Market** means the schedule of commitments for the purchase or sale of energy, 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 and purchase of demand reductions pursuant to Appendix III.E2 of Market Rule 1 for Capacity Commitment Periods commencing on or after June 1, 2017.

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

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

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

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

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

**Day-Ahead Load Response Program** provides a Day-Ahead aspect to the Load Response Program. The Day-Ahead Load Response Program allows Market Participants with registered Load Response Program Assets to make energy reduction offers into the Day-Ahead Load Response Program concurrent with the Day-Ahead Energy Market.

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

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

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

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

**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 Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for Demand Response Resources, Real-Time Demand Response Resources and Real-Time Emergency Generation 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 Real-Time Demand Response Asset to reduce demand. For Capacity Commitment Periods commencing on or after June 1, 2017, Demand Reduction Offer is an offer by a Market Participant with a Demand Response Resource to reduce demand.

**Demand Reduction Threshold Price** is a minimum offer price calculated pursuant to Section III.E1.6 and Section III.E2.6.

**Demand Reduction Value** is the quantity of reduced demand calculated pursuant to Section III.13.7.1.5.3 of Market Rule 1.

**Demand Resource** is a resource defined as Demand Response Capacity Resources, On-Peak Demand Resources, Seasonal Peak Demand Resources, Real-Time Demand Response Resources, or Real-Time Emergency Generation Resources. Demand Resources are installed measures (i.e., products, equipment, systems, services, practices and/or strategies) that result in additional and verifiable reductions in end-use demand on the electricity network in the New England Control Area pursuant to Appendix III.E1 and Appendix III.E2 of Market Rule 1, or during Demand Resource On-Peak Hours, Demand Resource

Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours, respectively. A Demand Resource may include a portfolio of measures aggregated together to meet or exceed the minimum Resource size requirements of the Forward Capacity Auction.

**Demand Resource Commercial Operation Audit** is an audit initiated pursuant to Section III.13.6.1.5.4.4.

**Demand Resource Forecast Peak Hours** are those hours, or portions thereof, in which, absent the dispatch of Real-Time Demand Response Resources, Dispatch Zone, Load Zone, or system-wide implementation of the action of ISO New England Operating Procedure No. 4 where the ISO would have begun to allow the depletion of Thirty-Minute Operating Reserve is forecasted in the ISO's most recent next-day forecast.

**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 Operable Capacity Analysis** means an analysis performed by the ISO estimating the expected dispatch hours of active Demand Resources given different assumed levels of Demand Resources clearing in the primary Forward Capacity Auction.

**Demand Resource Performance Incentives** means the additional monthly capacity payment that a Demand Resource may earn for producing a positive Monthly Capacity Variance in a period where other Demand Resources yield a negative monthly capacity variance.

**Demand Resource Performance Penalties** means the reduction in the monthly capacity payment to a Demand Resource for producing a negative Monthly Capacity Variance.

**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 the pumping load associated with pumped storage generators) 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 the electricity consumption of an individual end-use customer at a Retail Delivery Point or the aggregated electricity consumption of multiple end use customers from multiple delivery points that meets the registration requirements in Section III.E2.2.

**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 or the expected output levels of the generation of an individual end-use metered customer whose asset is comprised of Distributed Generation as determined pursuant to Section III.8A or Section III.8B.

**Demand Response 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.

**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 Dispatch Zone that meets the registration requirements and participates in the Energy Market pursuant to Appendix III.E2 of Market Rule 1 for Capacity Commitment Periods commencing on or after June 1, 2017.

**Demand Response Resource Notification Time** is the minimum time, from the receipt of a Dispatch Instruction, that it takes a Demand Response Resource that was not previously reducing demand to start 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 time required from the time a Demand Response Resource that was not previously reducing demand starts reducing demand in response to a Dispatch Instruction and the time the resource achieves its Minimum Reduction.

**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, and may be a Category A Designated Blackstart Resource or a Category B Designated Blackstart Resource.

**Designated Entity** is the entity designated by a Market Participant to receive Dispatch Instructions for generation 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)** is the Dispatch Rate expressed in megawatts.

**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 Resources, change External Transactions, or change the status of a Dispatchable Asset Related Demand in accordance with the Resource's or contract's Supply Offer or Demand Bid 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 Rate** means the control signal, expressed in dollars per MWh and/or megawatts, calculated and transmitted to direct the output level of each generating Resource and each Dispatchable Asset Related Demand and each Demand Response Resource dispatched by the ISO in accordance with the Offer Data.

**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.13.1.4.6.1.

**Dispatchable Asset Related Demand** is any portion of an Asset Related Demand of a Market Participant that is capable of having its energy consumption modified in Real-Time in response to Dispatch Instructions has Electronic Dispatch Capability, and 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 Manuals. Pumped storage facilities may qualify as Dispatchable Asset Related Demand resources, however, such resources shall not qualify as a capacity resource for both the generating output and dispatchable pumping demand of the facility.

**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 resources directly connected to end-use customer load and located behind the end-use customer's meter, which reduce the amount of energy that would otherwise have been produced by other capacity resources on the electricity network in the New England Control Area during Demand Resource On-Peak Hours, Demand Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours, provided that the aggregate nameplate capacity of the generation resource does not exceed 5 MW, or does not exceed the most recent annual non-coincident peak demand of the end-use metered customer at the location where the generation resource is directly connected, whichever is greater. Generation resources cannot participate in the Forward Capacity Market or the Energy Markets as Demand Resources or Demand Response Resources, unless they meet the definition of Distributed Generation.

**Do Not Exceed Dispatch Point** is a Dispatch Instruction indicating a maximum output level that a wind resource must not exceed.

**DR** Auditing Period is the summer DR Auditing Period or winter DR Auditing Period as defined in Section III.13.6.1.5.4.3.1.

**Dynamic De-List Bid** is a bid that may be submitted by Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources in the Forward Capacity Auction at prices of \$1.00/kW-month or lower, as described in Section III.13.2.3.2(d) of Market Rule 1.

**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 Maximum Limit or Economic Max is the maximum available output, in MW, of a resource that a Market Participant offers to supply in the Day-Ahead Energy Market or Real-Time Energy Market, as reflected in the resource's Supply Offer. This represents the highest MW output a Market Participant has offered for a resource for economic dispatch. A Market Participant must maintain an up-to-date Economic Maximum Limit for all hours in which a resource has been offered into the Day-Ahead Energy Market or Real-Time Energy Market.

Economic Minimum Limit or Economic Min is the maximum of the following values: (i) the Emergency Minimum Limit; (ii) a level supported by environmental and/or operating permit restrictions; or (iii) a level that addresses any significant economic penalties associated with operating at lower levels that can not be adequately represented by three part bidding (Start-Up Fee, No-Load Fee and incremental energy price). In no event shall the Economic Minimum Limit submitted as part of a generating unit's Offer Data be higher than the generation level at which a generating unit's incremental heat rate is minimized (i.e., transitioning from decreasing as output increases to increasing as output increases) except

that a Self-Scheduled Resource may modify its Economic Minimum Limit on an hourly basis, as part of its Supply Offer, in order to indicate the desired level of Self-Scheduled MWs.

**Economic Study** is defined in Section 4.1(b) of Attachment K to the OATT.

**EFT** is electronic funds transfer.

**Effective Heating Degree Days** is equal to 68 – (average of max and min Effective Temperature of the day).

**Effective Temperature** is equal to dry bulb temperature – [windspeed X (65-dry bulb temp)/100].

Elective Transmission Upgrade is a Transmission Upgrade that is participant-funded (i.e., voluntarily funded by an entity or entities that have agreed to pay for all of the costs of such Transmission Upgrade), and is not: (i) a Generator Interconnection Related Upgrade; (ii) a Reliability Transmission Upgrade (including a NEMA Upgrade, as appropriate); (iii) an Market Efficiency Transmission Upgrade (including a NEMA Upgrade, as appropriate); or (iv) initially proposed in an Elective Transmission Upgrade Application filed with the ISO in accordance with Section II.47.5 on a date after the addition or modification already has been otherwise identified in the current Regional System Plan (other than as an Elective Transmission Upgrade) in publication as of the date of that application.

**Elective Transmission Upgrade Applicant** is defined in Section II.47.5 of the OATT.

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

**Electronic Dispatch Capability** is the ability to provide for the electronic transmission, receipt, and acknowledgment of data relative to the dispatch of generating units and Dispatchable Asset Related Demands and the ability to carry out the real-time dispatch processes from ISO issuance of Dispatch Instructions to the actual increase or decrease in output of dispatchable Resources.

**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 generation amount, in MWs, that a generating unit 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, in order to facilitate: (1) bilateral Energy transactions; (2) self-scheduling of Energy; (3) Interchange Transactions in the Energy Market; and (4) Energy Imbalance Service under Section II 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 hours for which the Customer has a positive or negative Real-Time System Adjusted Net Interchange as determined by the ISO settlement process for the Energy Market.

**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 and Energy Non-Zero Spot Market Settlement Hours.

**Enrolling Participant** is the Market Participant that registers Customers for the Load Response Program.

**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, the Capacity Requirement 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.

**Estimated Net Regional Clearing Price (ENRCP)** is calculated in accordance with Section VII.C of the ISO New England Financial Assurance Policy.

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

**Exempt Real-Time Generation Obligation** means that portion of a Market Participant's Real-Time Generation Obligation that is not included in the calculation of Minimum Generation Emergency Credits pursuant to Appendix F of Market Rule 1.

**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 by 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, and, subject to ISO evaluation, for the Forward Capacity Auction to be conducted beginning February 1, 2008, any resource that is under construction and within 12 months of its expected commercial operations date.

**Existing Demand Resource** is a type of Demand Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.1.1 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 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.

**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.

**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 Generator means a generating unit that the ISO may dispatch within the hour 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) time to start does not exceed 30 minutes; (iv) available for dispatch and manned or has automatic remote dispatch capability; (v) capable of receiving

and acknowledging a start-up or shut-down dispatch instruction electronically; and (vi) has satisfied its minimum down time.

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

**FCA Payment** is the monthly capacity payment for a resource whose offer has cleared in a Forward Capacity Auction as described in Section III.13.7.2.1.1(a) of Market Rule 1.

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

**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.

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.

Forecast Hourly Demand Reduction means the estimated maximum quantity of energy reduction (MWh), measured at the end-use customer meter that can be produced by a Real-Time Demand Response Resource, or Real-Time Emergency Generation Resource, in each hour of an Operating Day. For a Real-Time Emergency Generation Asset that is metered at the generator and associated with a Real-Time Emergency Generation Resource, the Forecast Hourly Demand Reduction means the estimated maximum generator output (MWh) in each hour of an Operating Day.

**Formal Warning** is defined in Section III.B.4.1.1 of Appendix B of Market Rule 1.

**Formula-Based Sanctions** are defined in Section III.B.4.1.3 of Appendix B of Market Rule 1.

**Forward Capacity Auction (FCA)** is the annual descending clock auction in the Forward Capacity Market, as 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 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 \$14,000/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 Award Financial Assurance** is a required amount of financial assurance that must be maintained at all times from a Designated FTR Participant for each FTR awarded to the participant in any FTR

Auctions. This amount is calculated pursuant to Section VI.C of the ISO New England Financial Assurance Policy.

**FTR Bid Financial Assurance** is an amount of financial assurance required from a Designated FTR Participant for each bid submission into an FTR auction. This amount is calculated pursuant to Section VI.B of the ISO New England Financial Assurance Policy.

**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 generator that has been registered 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 Adjusted Audited Demand Reduction** is calculated in accordance with Section III.13.7.1.5.10.1.2.

**Hourly Calculated Demand Resource Performance Value** means the performance of a Demand Resource during Real-Time Demand Response Event Hours and Real-Time Emergency Generation Event Hours for purposes of calculating a Demand Reduction Value pursuant to Sections III.13.7.1.5.7.3 and III.13.7.1.5.8.3.

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

**Hourly PER** is calculated in accordance with Section III.13.7.2.7.1.1.1(a) of Market Rule 1.

**Hourly Real-Time Demand Response Resource Deviation** means the difference between the Average Hourly Load Reduction or Average Hourly Output of the Real-Time Demand Response Resource and the amount of load reduction or output that the Market Participant was instructed to produce pursuant to a Dispatch Instruction calculated pursuant to Section III.13.7.1.5.7.3.1.

**Hourly Real-Time Emergency Generation Resource Deviation** is calculated pursuant to Section III.13.7.1.5.8.3.1.

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

**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.

**Inadequate Supply** is defined in Section III.13.2.8.1 of Market Rule 1.

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

**Inadvertent Energy Revenue Charges or Credits** is defined in Section III.3.2.1(1) 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 generation 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.

**Insufficient Competition** is defined in Section III.13.2.8.2 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 and Attachment 1 to Schedule 23 of the OATT.

**Interconnection Agreement** is the "Large Generator Interconnection Agreement" or the "Small Generator Interconnection Agreement" pursuant to Schedules 22 and 23 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 and Attachment 1 to Schedule 23 of the OATT.

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

**Interconnection Procedure** is the "Large Generator Interconnection Procedures" or the "Small Generator Interconnection Procedures" pursuant to Schedules 22 and 23 of the ISO OATT.

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

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

**Intermittent Power Resource** is defined in Section III.13.1.2.2.2 of Market Rule 1.

**Intermittent Settlement Only Resource** is a Settlement Only Resource that is also an Intermittent Power Resource.

**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 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.

**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.

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** 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.

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 or Demand Bids 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 generating resources 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.

**Load Management** means installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that curtail electrical usage or shift electrical usage from Demand Resource On-Peak Hours, Demand Resource Seasonal Peak Hours, or Real-Time Demand Response Event Hours to other hours and reduce the amount of capacity needed, 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, chilled water storage, and other forms of electricity storage.

**Load Response Program** means the program implemented and administered by the ISO to promote demand side response as described in Appendix E to Market Rule 1.

**Load Response Program Asset** means one or more individual end-use metered customers that report load reduction and consumption, or generator output as a single set of values, are assigned an identification number, that participate in the Load Response Program and which encompass assets registered in the Real-Time Price Response Program or Real-Time Demand Response Assets, and are further described in Appendix E of Market Rule 1.

**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 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 the minimum amount of capacity that must be located within an import-constrained Load Zone, calculated as described in Section III.12.2 of Market Rule 1.

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

Localized Costs are the incremental costs resulting from a RTEP02 Upgrade or a Regional Benefit Upgrade that exceeds those requirements that the ISO deems reasonable and consistent with Good Utility Practice and the current engineering design and construction practices in the area in which the Transmission Upgrade is built. In making its determination of whether Localized Costs exist, the ISO will consider, in accordance with Schedule 12C of the OATT, the reasonableness of the proposed engineering design and construction method with respect to alternate feasible Transmission Upgrades and the relative costs, operation, timing of implementation, efficiency and reliability of the proposed Transmission Upgrade. The ISO, with advisory input from the Reliability Committee, as appropriate, shall review such Transmission Upgrade, and determine whether there are any Localized Costs resulting from such Transmission Upgrade. If there are any such costs, the ISO shall identify them in the Regional System Plan.

**Location** is a Node, External Node, Load Zone or Hub. For Capacity Commitment Periods commencing on or after June 1, 2017, the Location also is a Dispatch Zone.

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 or Reliability Region is the Zonal Price for that Load Zone or Reliability Region, respectively; and the Locational Marginal Price for a Hub is the Hub Price for that Hub. For Capacity Commitment Periods commencing on or after June 1, 2017, the Location Marginal Price for a Dispatch Zone is the Zonal Price for that Dispatch Zone.

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

**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.

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

**Major Transmission Outage** is a major transmission outage scheduled in accordance with ISO New England Operating Procedure No. 3.

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

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

**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 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 Obligations is defined in Section III.B.1.1 of Appendix B of Market Rule 1.

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 the maximum amount of capacity that can be procured in an export-constrained Load Zone, calculated as described in Section III.12.2 of Market Rule 1, to meet the Installed Capacity Requirement.

**Maximum Consumption Limit** is the maximum amount, in MW, available from the Dispatchable Asset Related Demand for economic dispatch and is based on the physical characteristics as submitted as part of a Resource's Offer Data except that a Self-Scheduled Dispatchable Asset Related Demand may modify its Minimum Consumption Limit on an hourly basis, as part of its Demand Bid, in order to indicate the desired level of Self-Scheduled MW.

**Maximum Facility Load** is the most recent annual non-coincident peak demand or, if unavailable, an estimate of the annual non-coincident peak demand of a Real-Time Demand Response Asset or a Real-Time Emergency Generation Asset, where the demand evaluated is established by adding actual metered

demand and the output of all generators located behind the asset's end-use customer meter in the same time intervals.

**Maximum Generation** is the maximum generation output of a Real-Time Demand Response Asset comprised of Distributed Generation or the maximum generation output of a Demand Response Asset comprised of Distributed Generation.

Maximum Interruptible Capacity is an estimate of the maximum hourly demand reduction amount that a Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or a Demand Response Asset can deliver. For assets that deliver demand reduction, the Maximum Interruptible Capacity is the asset's peak load less its uninterruptible load. For assets that deliver reductions through the use of generation, the Maximum Interruptible Capacity is the difference between the generator's maximum possible output and its expected output when not providing demand reduction.

**Maximum Load** is the most recent annual non-coincident peak demand or, if unavailable, an estimate of the annual non-coincident peak demand, of a Demand Response Asset, Real-Time Demand Response Asset or Real-Time Emergency Generation Asset.

**Maximum Net Supply** is an estimate of the maximum hourly Net Supply for a Demand Response Asset as measured from the Demand Response Asset's Retail Delivery Point.

**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 a 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 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 Value of the Demand 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 Value for an Existing Demand Resource is not over-

stated in a subsequent Capacity Commitment Period. Measure Life shall be determined consistent with the Demand 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, which includes 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 a Demand Resource supplier 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 Demand Resource suppliers 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 Value of the 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 a Demand Resource supplier with the monthly settlement report for the Forward Capacity Market, which documents the total Demand Reduction Values for all 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.

**Minimum Consumption Limit** is the minimum amount, in MW, available from a Dispatchable Asset Related Demand that is not available for economic dispatch and is based on the physical characteristics as submitted as part of a Resource's Offer Data.

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

**Minimum Generation Emergency Charge** means the charge used to allocate the cost of Minimum Generation Emergency Credits. Minimum Generation Emergency Charges are discussed in Appendix F of Market Rule 1.

**Minimum Generation Emergency Credits** are credits calculated pursuant to Appendix F of Market Rule 1 to compensate certain generating Resources for operation in excess of their Economic Minimum Limits during a Minimum Generation Emergency.

**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 Time Between Reductions** is the minimum number of hours that a Market Participant requires between the time the Demand Response Resource receives a Dispatch Instruction from the ISO to not reduce demand and the time the Demand Response Resource receives a Dispatch Instruction from the ISO to reduce demand.

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

**Monthly Capacity Variance** means a Demand Resource's actual monthly Capacity Value established pursuant to Section III.13.7.1.5.1 of Market Rule 1, minus the Demand Resource's final Capacity Supply Obligation for the month.

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

Monthly PER is calculated in accordance with Section III.13.7.2.7.1.1.2(a) of Market Rule 1.

**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 tenth 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.

**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 as provided in Section III.3.2.3, Section III.6.4 and Appendix F.

**NCPC Credit** means the payment made to a Resource as provided in Section III.3.2.3, Section III.6.4 and Appendix F.

**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.

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

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

**Net Regional Clearing Price** is described in Section III.13.7.3 of Market Rule 1.

**Net Supply** is energy injected at the Retail Delivery Point by a Demand Response Asset with Distributed Generation.

**Net Supply Generator Asset** is the Generator Asset registered in the energy market at the same Retail Delivery Point as a Demand Response Asset with Distributed Generation capable of delivering Net Supply.

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

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

**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 Resource, as described in Section III.13.2.3.2 of Market Rule 1.

**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 Required** is the amount of additional capacity required to meet the Installed Capacity Requirement or a Capacity Zone's Local Sourcing Requirement, as described in Section III.13.2.8.1.1 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 Resource Show of Interest Form, as described in Section III.13.1.10 of Market Rule 1.

**New Demand Resource** is a type of Demand Resource participating in the Forward Capacity Market, as defined in Section III.13.1.4.1.2 of Market Rule 1.

**New Demand Resource Qualification Package** is the information that a Project Sponsor must submit, in accordance with Section III 13.1.4.2.3 of Market Rule 1, for each resource that it seeks to offer in the Forward Capacity Auction as a New Demand Resource.

New Demand Resource Show of Interest Form is described in Section III.13.1.4.2 of Market Rule 1.

**New Demand Response Asset** is a Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or Demand Response Asset that is registered with the ISO, has been mapped to a

resource, is ready to respond, and has been included in the dispatch model of the remote terminal unit but does not have a winter audit value and a summer audit value.

**New Demand Response Asset Audit** is an audit of a New Demand Response Asset performed pursuant to Section III.13.6.1.5.4.8.

**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.

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.

**Nodal Amount** is node(s)-specific on-peak and off-peak proxy value to which an FTR bid or awarded FTR bid relates.

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 generating unit that must be paid to Market Participants with an Ownership Share in the unit 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 generating unit 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.13.7.3.1.3.

**Non-Commercial Capacity**, for the purposes of the ISO New England Financial Assurance Policy, is defined in Section VII.B of that policy.

**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 calculated in accordance with Section VII.B.2(i) 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-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-Intermittent Settlement Only Resource** is a Settlement Only Resource that is not an Intermittent Power Resource.

**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-Price Retirement Request** is a binding request to retire the entire capacity of a Generating Capacity Resource as described in Section III.13.1.2.3.1.5.

**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.

**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 generating unit and Dispatchable Asset Related Demand, and for Capacity Commitment Periods commencing on or after June 1, 2017, Demand Response Resource operating limits based on physical characteristics, and information necessary to schedule and dispatch generating and Dispatchable Asset Related Demand Resources, and for Capacity Commitment Periods commencing on or after June 1, 2017. Demand Response Resources for the provision of energy and 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.

**Offered CLAIM10** is a Supply Offer value between 0 and the CLAIM10 of a Resource that represents the amount of TMNSR available from the Resource.

**Offered CLAIM30** is a Supply Offer value between 0 and the CLAIM30 of a Resource that represents the amount of offline TMOR available from the Resource.

**Offered Full Reduction Time** is the value calculated pursuant to Section III.13.6.1.5.4.6.

On-Peak Demand Resource is a type of Demand 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 generating unit asset or Load Asset, where such unit or load 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.

**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.

**Peak Energy Rent (PER)** is described in Section III.13.7.2.7.1 of Market Rule 1.

**PER Proxy Unit** is described in Section III.13.7.2.7.1 of Market Rule 1.

**Percent of Total Demand Reduction Value Complete** means the delivery schedule as a percentage of a Demand Resource's total Demand Reduction Value that will be or has been achieved as of specific target dates, as described in Section III.13 of Market Rule 1.

**Permanent De-list Bid** is a bid that may be submitted by an Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Resource in the Forward Capacity Auction to permanently remove itself from the capacity market, as described in Section III.13.1.2.3.1.2 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 II Transfer Credit** is 60% of the HQICC, or such other fraction of the HQICC as the ISO may establish.

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.

**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(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.

**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.

**Poorly Performing Resource** is described in Section III.13.7.1.1.5 of Market Rule 1.

**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 Credit** is calculated pursuant to Section III.F.2.6.2 of Appendix F to Market Rule 1.

**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 or New Demand Resource participate in the Forward Capacity Market, as described in Section III.13.

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.

**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.

**Queue Position** has the meaning specified in Section I of Schedule 22 and Attachment 1 to Schedule 23 of the OATT.

**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.

**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 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)(iii) of Market Rule 1.

**Real-Time Adjusted Load Obligation Deviation** is defined in Section III.3.2.1(c)(iii) of Market Rule 1.

**Real-Time Commitment Periods** are periods of continuous operation bounded by a start up and the earlier to occur of a shut-down or a unit trip used to determine eligibility for Real Time NCPC Credit.

**Real-Time Congestion Revenue** is defined in Section III.3.2.1(f) of Market Rule 1.

**Real-Time Demand Reduction Obligation** is a Real-Time demand reduction amount determined pursuant to Section III.E1.8 for Capacity Commitment Periods commencing prior to June 1, 2017, and Section III.E2.7 for Capacity Commitment Periods commencing on or after June 1, 2017.

**Real-Time Demand Resource Dispatch Hours** means those hours, or portions thereof, in which ISO New England Operating Procedure No. 4 is implemented and the ISO has begun to allow the depletion of Thirty-Minute Operating Reserve on a Dispatch Zone, Load Zone, or system-wide basis, and the ISO notifies the Market Participants with Real-Time Demand Response Resources of such hours.

**Real-Time Demand Response Asset** means one or more individual end-use metered customers that are located at a single Node, report load reduction and consumption, or generator output as a single set of values, are assigned a unique asset identification number by the ISO, and that participate in the Forward Capacity Market as part of a Market Participant's Real-Time Demand Response Resource.

**Real-Time Demand Response Event Hours** means hours when the ISO dispatches Real-Time Demand Response Resources in response to Real-Time Demand Resource Dispatch Hours, which may include Dispatch Zone, Load Zone, or system-wide dispatch of such resources.

**Real-Time Demand Response Resource** is a type of Demand Resource that is comprised of installed measures (e.g., products, equipment, systems, services, practices and/or strategies) on end-use customer facilities that: (i) curtail electrical usage in response to a Dispatch Instruction; and (ii) continue curtailing electrical usage until receiving Dispatch Instructions to restore electrical usage. Such measures include Load Management and Distributed Generation. The period of curtailment shall be consistent with Real-Time Demand Response Event Hours.

**Real-Time Emergency Generation Asset** means one or more individual end-use metered customers that are located at a single Node, report load reduction and consumption, or generator output as a single set of values, are assigned a unique asset identification number by the ISO, and that participate in the Forward Capacity Market as part of a Market Participant's Real-Time Emergency Generation Resource.

**Real-Time Emergency Generation Event Hours** means those hours, or portions thereof, between 7 a.m. and 7 p.m. Monday through Friday, non-Demand Response Holidays in which the ISO dispatches Real-Time Emergency Generation Resources on a Dispatch Zone, Load Zone, or system-wide basis when deficient in Thirty-Minute Operating Reserve and when the ISO implements voltage reductions of five percent of normal operating voltage that require more than 10 minutes to implement.

Real-Time Emergency Generation Resource is Distributed Generation whose federal, state and/or local air quality permits, rules or regulations limit operation in response to requests from the ISO to the times when the ISO implements voltage reductions of five percent of normal operating voltage that require more than 10 minutes to implement. A Real-Time Emergency Generation Resource must be capable of: (i) curtailing its end-use electric consumption from the New England grid within 30 minutes of receiving a Dispatch Instruction; and (ii) continuing that curtailment until receiving a Dispatch Instruction to restore consumption.

**Real-Time Energy Market** means the purchase or sale of energy, purchase of demand reductions pursuant to Appendix III.E2 of Market Rule 1, 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(e) of Market Rule 1.

**Real-Time Energy Market Deviation Energy Charge/Credit** is defined in Section III.3.2.1(e) of Market Rule 1.

**Real-Time Energy Market Deviation Loss Charge/Credit** is defined in Section III.3.2.1(e) of Market Rule 1.

**Real-Time Generation Obligation** is defined in Section III.3.2.1(b)(ii) of Market Rule 1.

**Real-Time Generation Obligation Deviation** is defined in Section III.3.2.1(c)(ii) of Market Rule 1.

**Real-Time High Operating Limit** is the maximum output, in MW, of a resource that could be achieved, consistent with Good Utility Practice, in response to an ISO request for Energy under Section III.13.6.4 of Market Rule 1, for each hour of the Operating Day, as reflected in the resource's Offer Data. This value is based on real-time operating conditions and the physical operating characteristics and operating permits of the unit.

**Real-Time Load Obligation** is defined in Section III.3.2.1(b)(i) of Market Rule 1.

**Real-Time Load Obligation Deviation** is defined in Section III.3.2.1(c)(i) of Market Rule 1.

**Real-Time Locational Adjusted Net Interchange** is defined in Section III.3.2.1(b)(iv) of Market Rule 1.

**Real-Time Locational Adjusted Net Interchange Deviation** is defined in Section III.3.2.1(c)(iv) of Market Rule 1.

**Real-Time Loss Revenue** is defined in Section III.3.2.1(i) 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 Price Response Program** is the program described in Appendix E 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.2.4 of Market Rule 1.

**Real-Time Reserve Credit** is a Market Participant's compensation associated with that Market Participant's Resources' Real-Time Reserve Designation 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 adjusted after-the-fact utilizing revenue quality meter data as described under Section III.10 of Market Rule 1.

**Real-Time Reserve Opportunity Cost** is defined in Section III.2.7A(b) of 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.5.6.1 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 an 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) and shall not be credited or reduced for any behind-the-meter generation. 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.

**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 generating unit with appropriate telecommunications, control and response capability to increase or decrease its output in response to a regulating control signal, in accordance with the specifications in the ISO New England Manuals and ISO New England Administrative Procedures.

**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 Capability (REGCAP)** means the amount of Regulation capability available on a Market Participant's Resource as calculated by the ISO based upon that Resource's Automatic Response Rate and the available regulating range as specified in ISO New England Manual 11 – Market Operations.

**Regulation Clearing Price** is defined in Section III.3.2.2(e) of Market Rule 1.

**Regulation High Limit** is the maximum amount of energy that a generating unit can reliably produce when that unit is providing Regulation. The Regulation High Limit may be less than or equal to the unit's Economic Maximum Limit.

**Regulation Low Limit** is the minimum amount of energy that a generating unit can reliably produce when that unit is providing Regulation. The Regulation Low Limit may be greater than or equal to the unit's Economic Minimum Limit.

**Regulation Opportunity Cost** is defined in Section III.3.2.2(i) of Market Rule 1.

**Regulation Rank Price** is calculated in accordance with Section III.1.11.5(b) of Market Rule 1.

**Regulation Requirement** is the hourly amount of Regulation MWs required by the ISO to maintain system control and reliability as calculated and posted on the ISO website.

**Regulation Service Credit** is the credit associated with provision of Regulation Service Megawatts and is calculated in accordance with Section III.3.2.2(c) of Market Rule 1.

Regulation Service Megawatts are calculated in accordance with Section III.3.2.2(f) of Market Rule 1.

**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.

**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, for Capacity Commitment Periods commencing on or after June 1, 2017, 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 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 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 generating unit, a Dispatchable Asset Related Demand, an External Resource or an External Transaction or, for Capacity Commitment Periods commencing on or after June 1, 2017, 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 enduse 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.

**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.

**Sanctionable Behavior** is defined in Section III.B.3 of Appendix B 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 generating unit or ISO-approved combination of units, and represent the maximum dependable load carrying ability of such unit or units, excluding capacity required for station use.

**Seasonal Claimed Capability Audit** is the audit performed pursuant to Section III.1.5.1.3.

**Seasonal DR Audit** is a seasonal audit of the demand response capability of a Demand Resource initiated pursuant to Section III.13.6.1.5.4.1.

**Seasonal Peak Demand Resource** is a type of Demand 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.

**Self-Schedule** is the action of a Market Participant in committing and/or scheduling its Resource, in accordance with applicable ISO New England Manuals, to provide service in an hour, whether or not in the absence of that action the Resource would have been scheduled or dispatched by the ISO to provide the service. Demand Response Resources are not permitted to Self-Schedule.

**Self-Scheduled MW** is an amount, in megawatts, that is Self-Scheduled and is equal to the greater of: (i) the Resource's Economic Minimum Limit; or (ii) the Resource's Minimum Consumption Limit; or (iii) for a generating Resource for which the Regulation Self-Schedule flag is set for the hour and the unit was on Regulation for at least 20 minutes during the applicable hour of the Operating Day, the median value of all Regulation setpoints (Desired Dispatch Point) used by the Resource while regulating.

**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 office.

**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.D of the ISO New England Financial Assurance Policy.

**Settlement Only Resources** are generators of less than 5 MW or otherwise eligible for Settlement Only Resource treatment as described 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.

**Seven-Day Forecast** has the meaning specified in Section III.H.3.3(a).

**Shortage Event** is defined in Section III.13.7.1.1.1 of Market Rule 1.

**Shortage Event Availability Score** is the average of the hourly availability scores for each hour or portion of an hour during a Shortage Event, as described in Section III.13.7.1.1.1.A of Market Rule 1.

**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.

**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).

**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 generating unit to Market Participants with an Ownership Share in the unit each time the unit 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.

**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 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 risk-adjusted going forward costs associated with a Station that are avoided only by (1) the clearing of the Static De-List Bids or the Permanent De-List Bids of all the Existing Generating Capacity Resources comprising the Station; or (2) the acceptance of a Non-Price Retirement Request of the Station, calculated in the same manner as the net-risk adjusted going forward costs of Existing Generating Capacity Resources as described in Section III.13.1.2.3.2.1.2.

**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.

**Successful FCA** is a Forward Capacity Auction in which a Capacity Zone has neither Inadequate Supply nor Insufficient Competition.

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. 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.

**Supplemental Availability Bilateral** is described in Section III.13.5.3.2 of Market Rule 1.

**Supplemental Capacity Resources** are described in Section III.13.5.3.1 of Market Rule 1.

**Supplemented Capacity Resource** is described in Section III.13.5.3.2 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. The daily bid Blocks in the price-based Real-Time offer/bid will be multiplied by the number of hours in the day 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, or Schedule 23 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.

**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 the reserve capability of a generating unit that can be converted fully into energy within ten minutes from the request of the ISO, and is provided by generating units that are either electrically synchronized or not electrically synchronized to the New England Transmission System or the reserve capability of a Dispatchable Asset Related Demand that can be fully utilized within ten minutes from the request of the ISO to reduce consumption.

**Ten-Minute Non-Spinning Reserve Service** is the form of Ancillary Service described in Schedule 6 of the OATT.

**Ten-Minute Spinning Reserve (TMSR)** is the reserve capability of a generating unit that can be converted fully into energy within ten minutes from the request of the ISO or a Dispatchable Asset Related Demand pump that can reduce energy consumption to provide reserve capability within ten minutes from the request of the ISO, and is provided by generating units and Dispatchable Asset Related Demand pumps electrically synchronized to the New England Transmission System.

**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) means the reserve capability of a generating unit that can be converted fully into energy within thirty minutes from the request of the ISO, and is provided by generating units that are either not electrically synchronized or synchronized to the New England Transmission System or the reserve capability of a Dispatchable Asset Related Demand that can be fully utilized within thirty minutes from the request of the ISO to reduce consumption.

**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.

**Time-on-Regulation Credit** is the credit associated with provision of Time-on-Regulation Megawatts and is calculated in accordance with Section III.3.2.2(b) of Market Rule 1.

**Time-on-Regulation Megawatts** is the amount of Regulation capability provided during one hour calculated in accordance with Section III.3.2.2(g) of Market Rule 1.

**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 O&M Payment** is the annual compensation calculated under either Section 5.1 or 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 Negative Hourly Demand Response Resource Deviation** means the absolute value of the sum of the negative Hourly Real-Time Demand Response Resource Deviations and negative Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Dispatch Zone.

**Total Positive Hourly Demand Response Resource Deviation** means the sum of the positive Hourly Real-Time Demand Response Resource Deviations and positive Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Dispatch Zone.

**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 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 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.

**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 Demand Resource project. The Updated Measurement and Verification Plan may include updated Demand Resource 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 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.

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. 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.

### III.8A Demand Response Baselines

Section III8.A shall govern Demand Response Baselines calculated for Capacity Commitment Periods commencing prior to June 1, 2017.

A Demand Response Baseline is calculated for any Real-Time Demand Response Asset or Real-Time Emergency Generation Asset that requires a baseline on a daily basis using five-minute meter data.

### 8A.1 Establishing the Initial Demand Response Baseline

The Demand Response Baseline for a new Real-Time Demand Response Asset or Real-Time Emergency Generation Asset (an asset with no previously computed Demand Response Baseline) shall be the simple average of meter data for the asset for each five-minute interval from the initial ten non-Demand Response Holiday weekdays. The initial ten non-Demand Response Holiday weekdays of meter data used to establish the Demand Response Baseline shall consist of the first ten consecutive non-Demand Response Holiday weekdays with a complete set of interval meter data. A Market Participant may not submit Demand Reduction Offers until the month following the initial establishment of a Demand Response Baseline for an asset.

### 8A.2 Establishing the Demand Response Baseline for the Next Day

If, for a Real-Time Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline:

- (a) the asset has been dispatched or audited in the present day pursuant to Section III.13, or;
- (b) the Demand Reduction Offer associated with the asset is eligible in the present Operating Day for payments pursuant to Section III.E1.9, or;
- (c) the present day is a Demand Response Holiday, Saturday or Sunday, then:

the asset's Demand Response Baseline, in each five-minute interval, for the next day is equal to the Demand Response Baseline, in the same five-minute interval from the present day.

# 8A.3 Determining if Meter Data From the Present Day is Used in the Demand Response Baseline for the Next Day

If, for a Real-time Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline:

- (a) the present day is not a Demand Response Holiday, Saturday or Sunday, and; the asset has not been dispatched or audited in the present day pursuant to Section III.13, and; the Demand Reduction Offer associated with the asset is not eligible in any hour of the present day for payments pursuant to Section III.E1.9, or;
- (b) the present day is not a Demand Response Holiday, Saturday or Sunday and more than seven of the prior 10 non-Demand Response Holiday weekdays have established a Demand Response Baseline determined pursuant to Section III.8A.2; then:

the asset's Demand Response Baseline in each five-minute interval, for the next day is calculated as the sum of 0.9 times the asset's Demand Response Baseline established for the present day in the same five-minute interval and 0.1 times the asset's meter data in the same five-minute interval from the present day.

### 8A.4 Baseline Adjustment

# 8A.4.1 Baseline Adjustment for Real-Time Demand Reductions From Real-Time Demand Response Assets Without Generation or From Real-Time Emergency Generation Assets Without Additional Generation

For each day the ISO calculates the Real-Time demand reduction amount of a Real-Time Demand Response Asset or Real-Time Emergency Generation Asset, the ISO will calculate an adjustment factor equal to the average difference (MW) between the asset's actual metered demand and its Demand Response Baseline in the intervals during the two-hour period beginning 2.5 hours prior to the start of the first interruption interval in the Operating Day. The adjustment factor will be added to the Demand Response Baseline in every interval of the day, which may increase or decrease the Demand Response Baseline. However, the resulting adjusted Demand Response Baseline in any interval shall not be less than zero and shall not exceed the asset's Maximum Load.

8A.4.2 Baseline Adjustment for Real-Time Demand Reductions From Real-Time Demand
Response Assets with Generation or From Real-Time Emergency Generation Assets
With Additional Generation

For each day that the ISO calculates the Real-Time demand reduction amount of a Real-Time Demand Response Asset or Real-Time Emergency Generation Asset, the ISO will calculate an adjustment factor equal to the average difference (MW) between the sum of the asset's actual metered demand and the output of all generators, or for Real-Time Emergency Generator Assets all additional generators, located behind the asset's end-use customer meter in the same time intervals and the asset's Demand Response Baseline in the intervals during the two-hour period beginning 2.5 hours prior to the start of the first interruption interval in the Operating Day. The adjustment factor will be added to the Demand Response Baseline in every interval of the day, which may increase or decrease the Demand Response Baseline. However, the resulting adjusted Demand Response Baseline in any interval shall not be less than zero and shall not exceed the asset's Maximum Facility Load.

### 8A.4.3 Baseline Adjustment for Real-Time Demand Reductions Produced By Directly Metered Generation

For each day that the ISO calculates the Real-Time demand reduction amount of a Real-Time Demand Response Asset that is comprised of a Distributed Generation asset located behind the end-use customer meter of an individual end-use customer facility, the asset's Demand Response Baseline shall not be subject to the baseline adjustment.

### III.8B Demand Response Baselines

Section III.8B shall govern Demand Response Baselines calculated for Capacity Commitment Periods commencing on or after June 1, 2017.

A Demand Response Baseline is calculated in 5-minute intervals for each Demand Response Asset and each Real-Time Emergency Generation Asset that is metered at the Retail Delivery Point for the following day types:

- (a) weekdays (Monday-Friday) that are non-Demand Response Holidays;
- (b) Saturdays, and;
- (c) Sundays (including Demand Response Holidays).

### **8B.1** Demand Response Baseline Calculations

If a Demand Response Asset's metered demand represents Net Supply, the Demand Response Asset's metered demand in the interval will be set equal to zero and that zero demand value will be used in the Demand Response Baseline calculations for that interval pursuant to Sections III.8B.2 and III.8B.4.

### 8B.1.1 Demand Response Baseline Real-Time Emergency Generation Asset Adjustment

To the extent a Real-Time Emergency Generation Asset is located at the same Retail Delivery Point as a Demand Response Asset, the metered output of the Real-Time Emergency Generation Asset, in each five-minute interval, shall be added to the metered demand measured at the Retail Delivery Point in the same intervals for purposes of determining the Demand Response Asset's Demand Response Baseline.

### 8B.2 Establishing an Initial Demand Response Baseline

The Demand Response Baseline for a Demand Response Asset or Real-Time Emergency Generation Asset that is metered at the Retail Delivery Point with no previously computed Demand Response Baseline shall be the simple average of metered demand data for the asset for each five-minute interval, subject to the conditions in Section III.8B.1, from the initial 10 days of the same day type. The initial 10 days of meter data used to establish the Demand Response Baseline shall consist of the first 10 consecutive days of the same day type with a complete set of interval meter data. A Market Participant may not submit Demand Reduction Offers for a given day type until the month following the initial establishment of the Demand Response Baseline of the same day type for a Demand Response Asset.

### 8B.3 Establishing a Demand Response Baseline for the Next Day

If, for a Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline for a day type and the asset has been dispatched or audited in the present day pursuant to Section III.13 or Section E2.5, the Demand Response Baseline of the Demand Response Asset or Real-Time Emergency Generation Asset, in each five-minute interval, for the next day of the same day type is equal to the Demand Response Baseline of that Demand Response Asset or Real-Time Emergency Generation Asset, in the same five-minute interval from the present day.

# 8B.4 Determing if Meter Data from the Present Day is Used in the Demand Response Baseline for the Next Day of the Same Day Type

If, for a Demand Response Asset or Real-Time Emergency Generation Asset that has established an initial Demand Response Baseline for that day type, the asset has not been dispatched or audited in the present day pursuant to Section III.13 or Section III.E2.5, or more than seven of the prior 10 days of the same day type have a Demand Response Baseline determined pursuant to Section III.8B.3, then:

the Demand Response Baseline of the Demand Response Asset or Real-Time Emergency Generation Asset in each five-minute interval, for the next day of the same day type as the present day, is calculated as the sum of 0.9 times the Demand Response Baseline of that Demand Response Asset or Real-Time Emergency Generation Asset for the present day in the same five-minute interval and 0.1 times the Demand Response Asset's or Real-Time Emergency Generation Asset's meter data, subject to the conditions in Section III.8B.1, in the same five-minute interval from the present day.

### 8B.5 Baseline Adjustment

For each day that a Demand Response Resource associated with a Demand Response Asset is scheduled in the Day-Ahead Energy Market or that a Demand Response Resource associated with a Demand Response Asset is dispatched in Real-Time for a demand reduction amount greater than zero, the ISO will calculate an adjustment factor equal to the average difference (MW) between the Demand Response Asset's metered demand which shall be adjusted pursuant to Section III.8B.1.1 (inclusive of any Net Supply), and its Demand Response Baseline in the intervals during the two-hour period for Demand Response Resources beginning two hours plus the Demand Response Resource Start-Up Time prior to the

start of the first interruption interval in the present day. For each day that a Real-Time Emergency Generation Resource associated with a Real-Time Emergency Generation Asset is dispatched in Real-Time for a demand reduction amount greater than zero, the ISO will calculate an adjustment factor equal to the averge difference (MW) between the Real-Time Emergency Generation Asset's metered demand and its Demand Response Baseline in the intervals during the two-hour period for Real-Time Emergency Generation Resource beginning 2.5 hours prior to the start of the first interruption interal in the present day.

The adjustment factor will be added to the Demand Response Baseline in every interval of the day, which may increase or decrease the Demand Response Baseline. However, the resulting adjusted Demand Response Baseline in any interval shall not be less than zero and shall not exceed the facility's Maximum Load. For purposes of establishing the adjusted Demand Response Baseline, if a Demand Response Asset's metered demand represents Net Supply, the Demand Response Asset's metered demand in the interval will be set equal to zero.

### III.13.1. Forward Capacity Auction Qualification.

Each resource, or portion thereof, must qualify as a New Generating Capacity Resource (Section III.13.1.1), an Existing Generating Capacity Resource (Section III.13.1.2), a New Import Capacity Resource or Existing Import Capacity Resource (Section III.13.1.3), or a New Demand Resource or Existing Demand Resource (III.13.1.4). Each resource must be at least 100 kW in size to participate in the Forward Capacity Auction, except for resources registered with the ISO prior to the earliest date that any portion of this Section III.13 becomes effective. An offer may be composed of separate resources, pursuant to the provisions of Section II.13.1.5. Pursuant to the provisions of this Section III.13.1, the ISO shall determine a summer Qualified Capacity and a winter Qualified Capacity for each resource, and an FCA Qualified Capacity for each New Generating Capacity Resource, New Import Capacity Resource, and New Demand Resource. A Generating Capacity Resource and a Demand Resource may not both participate in the Forward Capacity Market if located at the same Retail Delivery Point, unless the Generating Capacity Resource is separately metered and its output is added to the metered load as measured at the Retail Delivery Point.

All Project Sponsors must be Market Participants no later than 30 days prior to the deadline for submitting the financial assurance deposit described in Section III.13.1.9.

### III.13.1.1. New Generating Capacity Resources.

To participate in a Forward Capacity Auction as a New Generating Capacity Resource, a resource or proposed resource must meet the requirements of this Section III.13.1.1. A New Generating Capacity Resource may elect, during the qualification process, to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that clears in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only, as described in Section III.13.1.1.2.2.4.

### III.13.1.1.1. Definition of New Generating Capacity Resource.

A resource or a portion of a resource that is not a New Import Capacity Resource or Existing Import Capacity Resource (as defined in Section III.13.1.3), or a New Demand Resource or Existing Demand Resource (as discussed in Section III.13.1.4) shall be considered a New Generating Capacity Resource for participation in a Forward Capacity Auction if either: (i) the resource has never previously been counted as a capacity resource as described in Section III.13.1.1.1.1; or (ii) the resource, or a portion thereof, meets one of the criteria in Section III.13.1.1.1.2.

### III.13.1.1.1.1. Resources Never Previously Counted as Capacity.

(a) A resource, or a portion thereof, will be considered to have never been counted as a capacity resource if: (i) it never previously received any payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010, except any such payment that is received after the resource has cleared as a New Generating Capacity Resource in a Forward Capacity Auction; and (ii) it has not cleared in any previous Forward Capacity Auction.

### (b) [Reserved.]

Where a New Capacity Generating Resource was accepted for participation in the qualification process for a previous Forward Capacity Auction, but cleared less than its summer Qualified Capacity in that previous Forward Capacity Auction and is having its critical path schedule monitored by the ISO in accordance with Section III.13.3, the portion of the resource that did not clear in the previous Forward Capacity Auction shall be a New Generating Capacity Resource in the subsequent Forward Capacity Auction. Such a New Generating Capacity Resource must satisfy all of the qualification process requirements applicable to a New Generating Capacity Resource as described in Section III.13.1.1.2, except that the Project Sponsor is not required to resubmit documentation demonstrating site control (Section III.13.1.1.2.2.1) or to resubmit a critical path schedule (Section III.13.1.1.2.2.2) or to provide a new Qualification Process Cost Reimbursement Deposit (Section III.13.1.1.2.1(e)).

### III.13.1.1.1.2. Resources Previously Counted as Capacity.

A resource that has previously been counted as a capacity resource, including a deactivated or retired capacity resource, may elect to participate in the Forward Capacity Auction as a New Generating Capacity Resource, as described in this Section III.13.1.1.1.2. The incremental expenditure required to reactivate a resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) may be included in the calculation of the dollar per kilowatt thresholds in this Section III.13.1.1.1.2. A resource accepted for participation in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section III.13.1.1.1.2 shall participate in the Forward Capacity Auction pursuant to Section III.13.2.3.2(e). A resource shall be accepted for participation as a new resource if it complies with one of the following three subsections:

- (a) Where investment in the resource will result, by the commencement of the Capacity Commitment Period, in an increase in output by an amount exceeding the greater of: (i) 20 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction; or (ii) 40 MW above the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction, the whole resource shall participate in the Forward Capacity Auction as a New Generating Capacity Resource; or
- (b) Where investment in the resource subsequent to January 1, 2007 and prior to the conclusion of the first Capacity Commitment Period associated with the Capacity Supply Obligation for which treatment as a new resource may be applied, for the purposes of re-powering will be equal to or greater than \$200 per kilowatt of the whole resource's summer Qualified Capacity after re-powering, the owner of the resource may elect that the whole resource participate in the Forward Capacity Auction as a New Generating Capacity Resource. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs; or
- (c) Where investment in the resource subsequent to January 1, 2007 and prior to the conclusion of the first Capacity Commitment Period associated with the Capacity Supply Obligation for which treatment as a new resource may be applied, for the purpose of compliance with environmental regulations or permits will be equal to or greater than \$100 per kilowatt of the whole resource's summer Qualified Capacity after the investment, the owner of the resource may elect that the whole resource participate in the Forward Capacity Auction as a New Generating Capacity Resource. The \$100 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs.

### III.13.1.1.1.3. Incremental Capacity of Resources Previously Counted as Capacity.

The owner of a resource previously counted as a capacity resource may elect to have the incremental amount of capacity above the summer Qualified Capacity of the resource at the time of the qualification process participate in the Forward Capacity Auction as a New Generating Capacity Resource, where investment in the resource:

(a) will result, by the start of the Capacity Commitment Period, in an increase in output greater than 2 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction, but less than or equal to the greater of: (i) 20 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction; or (ii) 40 MW; and

(b) will be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs. These investment costs may include the costs associated with reactivating a resource that was previously deactivated pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and in which investment in the resource was undertaken prior to reactivation. If the incremental amount of capacity seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section does not cause the resource to exceed the megawatt amount approved in the resource's Interconnection Agreement, the Project Sponsor must submit a New Capacity Qualification Package but is not required to submit a New Capacity Show of Interest Form for the incremental amount by the New Capacity Qualification Deadline. If the incremental amount of capacity seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section III.13.1.1.1.3 causes the resource to exceed the megawatt amount approved in the resource's Interconnection Agreement or MW amount approved pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), the Project Sponsor must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2 for the incremental amount.

### III.13.1.1.1.4. De-rated Capacity of Resources Previously Counted as Capacity.

For purposes of the Forward Capacity Market, de-rated capacity of a resource shall be measured by the difference between the summer Qualified Capacity prior to the de-rating of the resource and the most recent summer demonstration of Seasonal Claimed Capability of a resource, as of the fifth Business Day of October. The owner of a resource previously counted as a capacity resource that has been de-rated by at least 2 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) but by no more than the lesser of 20 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) or 40 MW for three or more years at the time of the Forward Capacity Auction may elect to have the incremental amount of capacity above the capacity level established while de-rated treated as a New Generating Capacity Resource if it demonstrates that it will be reestablished prior to the start of the Capacity Commitment Period and that the investment in the resource for such purposes shall be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The Project Sponsor must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2.2 for the incremental amount of capacity for the relevant Forward Capacity Auction. The

\$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the most recent Handy-Whitman Index of Public Utility Construction Costs. The owner of a resource seeking to have the incremental amount of capacity counted as a New Generating Capacity Resource as provided in this Section, must demonstrate based on historical data that the resource previously operated at a level at least 2 percent above the de-rated amount.

### III.13.1.1.1.5. Treatment of Resources that are Partially New and Partially Existing.

For purposes of this Section III.13.1, where only a portion of a single resource is treated as a New Generating Capacity Resource, either as a result of partial clearing in a previous Forward Capacity Auction or pursuant to Section III.13.1.1.1.3 or Section III.13.1.1.1.4, then except as otherwise indicated in this Section III.13.1, that portion of the resource shall be treated as a New Generating Capacity Resource, and the remainder of the resource shall be treated as an Existing Generating Capacity Resource.

#### III.13.1.1.1.6. Treatment of Deactivated and Retired Units.

- (a) [Reserved.]
- (b) A resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), as applicable, that submits to the ISO a reactivation plan demonstrating that the resource shall return to Commercial Operation shall, subject to ISO review and acceptance of that reactivation plan, be treated as an Existing Generating Capacity Resource unless that resource satisfies the criteria under Section III.13.1.1.1.2 as a New Generating Capacity Resource. Such reactivation plans must be received by the ISO no later than 10 Business Days before the Existing Capacity Qualification Deadline. A resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), as applicable, that submits to the ISO a reactivation plan demonstrating that the resource shall return to Commercial Operation and having a material modification as described in Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions), as applicable, shall be subject to Section III.13.1.1.2.3 (Initial Interconnection Analysis).

### III.13.1.1.2. Qualification Process for New Generating Capacity Resources.

For a resource to qualify as a New Generating Capacity Resource, the resource's Project Sponsor must make two separate submissions to the ISO: First, the Project Sponsor must submit a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Second, the Project

Sponsor must submit a New Capacity Qualification Package no later than the New Capacity Qualification Deadline. Each of these submissions is described in more detail in this Section III.13.1.1.2. The Project Sponsor must also submit to the ISO an Interconnection Request under Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff prior to submitting a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Both the New Capacity Show of Interest Form and the New Capacity Qualification Package are required regardless of the status of the project under the generator interconnection procedures described in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff. Neither the New Capacity Show of Interest Form nor the New Capacity Qualification Package constitutes an Interconnection Request. A Project Sponsor may withdraw from the qualification process at any time prior to three Business Days before the submission of the financial assurance deposit pursuant to Section III.13.1.9.1 by providing written notification of such withdrawal to the ISO. Any withdrawal, whether pursuant to this provision or as determined by the ISO (for example as described in Section III.13.1.1.2.1 or Section III.13.1.9.3), shall be irrevocable. The Project Sponsor of a withdrawn application is subject to reconciliation of its Qualification Process Cost Reimbursement Deposit described in Section III.13.1.9.3. Upon submission of the financial assurance deposit by the Project Sponsor pursuant to Section III.13.1.9.1, the resource is obligated to participate and will be included in the Forward Capacity Auction at its FCA Qualified Capacity amount at the Forward Capacity Auction Starting Price. None of the provisions of this Section III.13.1, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, supersedes, replaces, or satisfies any of the requirements of Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff, except as specifically provided thereunder. Determinations by the ISO pursuant to this Section III.13.1.1.2, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, are for purposes of qualification for participation in the Forward Capacity Auction only, and do not constitute a right or approval to interconnect, and do not guarantee the ability to interconnect.

### III.13.1.1.2.1. New Capacity Show of Interest Form.

Except as otherwise provided in this Section III.13.1.1.2.1, for each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must submit to the ISO a New Capacity Show of Interest Form as described in this Section III.13.1.1.2.1 during the New Capacity Show of Interest Submission Window. After submission of a New Capacity Show of Interest Form, material changes (as defined in Section 4.4 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff) may not be made to the information contained therein. The New Capacity Show of Interest Form is available on the ISO website.

A New Capacity Show of Interest Form to which a material change has been made shall be considered withdrawn. No change that may result in a reduction in capacity may be made to a project described in a New Capacity Show of Interest Form or New Capacity Qualification Package between the date that is 150 days before the start of the Forward Capacity Auction and the deadline for qualification determination notifications described in Section III.13.1.1.2.8.

- (a) A completed New Capacity Show of Interest Form shall include the following information, to the extent the information is not already provided under an active Interconnection Request under Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff, and other such information necessary to evaluate a project: the project name; the Project Sponsor's contact information; the Project Sponsor's ISO customer status; the project's expected Commercial Operation date; the project address or location, and if relevant, asset identification number; the status of the project under the generator interconnection procedures described in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff; whether the resource has ever previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010; the capacity (in MW) of the New Generating Capacity Resource; the Economic Minimum Limit (in MW) of the New Generating Capacity Resource; a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21 or some other type); a simple location plan and a one-line diagram of the plant and station facilities, including any known transmission facilities; the location of the proposed interconnection; and other specific project data as set forth in the New Capacity Show of Interest Form. The ISO may waive the submission of any information not required for evaluation of a project. A completed New Capacity Show of Interest Form shall also specify the Queue Position associated with the project pursuant to Section 4.1 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff. Submittal of the Interconnection Request may take place prior to the qualification process described here, but no later than the date on which the New Capacity Show of Interest Form is submitted to the ISO; however, the Interconnection Customer Interconnection Request must still be active and consistent with the project described in the New Capacity Show of Interest Form as well as the New Capacity Qualification Package to be submitted as described in Section III.13.1.1.2.2.
- (b) The Project Sponsor must submit with the New Capacity Show of Interest Form, documentation demonstrating that the Project Sponsor has already achieved control of the project site for the duration of the relevant Capacity Commitment Period. Site control shall have the same meaning as set forth in Schedule 22 or Schedule 23, as applicable, of Section II of the Transmission, Markets and Services Tariff.

A resource that has previously been counted as a capacity resource is not required to submit site control documentation.

- (c) In the New Capacity Show of Interest Form, the Project Sponsor must indicate if the New Generating Capacity Resource is incremental capacity associated with a resource that previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010 as discussed in Section III.13.1.1.1.3, or if the New Generating Capacity Resource is incremental capacity associated with a resource previously listed as a capacity resource that has been de-rated for three or more years at the time of the Forward Capacity Auction, as discussed in Section III.13.1.1.1.4.
- (d) [Reserved.]
- (e) With the New Capacity Show of Interest Form, the Project Sponsor must submit the Qualification Process Cost Reimbursement Deposit, as described in Section III.13.1.9.3.

### III.13.1.1.2.2. New Capacity Qualification Package.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must submit a New Capacity Qualification Package no later than the New Capacity Qualification Deadline, described in Section III.13.1.10. Except as otherwise provided in this Section III.13.1, the New Capacity Qualification Package shall conform to the requirements of this Section III.13.1.1.2.2. The ISO may waive the submission of any information not required for evaluation of a project. No change that may result in a reduction in capacity may be made to a project described in a New Capacity Show of Interest Form or New Capacity Qualification Package between the date that is 150 days before the start of the Forward Capacity Auction and the deadline for qualification determination notifications described in Section III.13.1.1.2.8.

### **III.13.1.1.2.2.1.** Site Control.

For all Forward Capacity Auctions and reconfiguration auctions, the Project Sponsor must submit, with the New Capacity Show of Interest Form, documentation demonstrating that the Project Sponsor has already achieved control of the project site for the duration of the relevant Capacity Commitment Period. Site control shall mean that: (i) the Project Sponsor is the owner in fee simple of the real property on which the project will be located; (ii) the Project Sponsor holds a valid written leasehold interest in the real property on which the project will be located; (iii) the Project Sponsor holds a valid written option,

exercisable solely by the Project Sponsor or its assignee, to purchase or lease property on which the project will be located; or (iv) the Project Sponsor holds a duly executed written contract to purchase or lease the real property on which the project will be located. A resource that has previously been counted as a capacity resource is not required to submit site control documentation.

#### III.13.1.1.2.2.2. Critical Path Schedule.

In the New Capacity Qualification Package, the Project Sponsor must provide a critical path schedule for the project with sufficient detail to allow the ISO to evaluate the feasibility of the project being built and the feasibility that the project will meet the requirement that the project achieve Commercial Operation as qualified no later than the start of the relevant Capacity Commitment Period. The critical path schedule shall include, at a minimum, the dates on which the following milestones have or are expected to occur:

- (a) **Major Permits**. In the New Capacity Qualification Package, the Project Sponsor must list all major permits required for the project, and for each major permit, the Project Sponsor must list the agency requiring the permit, the date on which application for the permit is expected to be made, and the expected date of approval. Major permits shall include, but are not limited to: (i) all federal and state permits; and (ii) local, regional, and town permits. The permitting and installation process associated with any major ancillary infrastructure (such as new gas pipelines, new water supply systems, or large storage tanks) should be included in this portion of the New Capacity Qualification Package.
- (b) **Project Financing Closing**. In the New Capacity Qualification Package, the Project Sponsor shall provide (i) the estimated dollar amount of required project financing; (ii) the expected sources of that financing; and (iii) the expected closing date(s) for the project financing.
- (c) **Major Equipment Orders**. In the New Capacity Qualification Package, the Project Sponsor must provide a list of all of the major components necessary for the project, and the date or dates on which all major components necessary for the project have been or are expected to be ordered. Although the specific technology will determine the list of major components to be included, the list shall include, to the extent applicable: (i) electric generators which may include equipment such as fuel cells or solar photovoltaic equipment; (ii) turbines; (iii) step-up transformers; (iv) relay panels (v) distributed control systems; and (vi) any other single piece of equipment or system such as a cooling water system, steam generation, steam handling system, water treatment system, fuel handling system or emissions control system that is not included as a sub-component of other equipment listed in this Section III.13.1.1.2.2.2(d) and that accounts for more than five percent of the total project cost.

- (d) **Substantial Site Construction**. In the New Capacity Qualification Package, the Project Sponsor must provide the approximate date on which the amount of money expended on construction activities occurring on the project site is expected to exceed 20 percent of construction financing costs.
- (e) **Major Equipment Delivery**. In the New Capacity Qualification Package, the Project Sponsor must provide the dates on which the major equipment described in subsection (d) above has been or is scheduled to be delivered to the project site.
- (f) **Major Equipment Testing**. In the New Capacity Qualification Package, the Project Sponsor must provide the date or dates on which each piece of major equipment described in subsection (d) above is scheduled to undergo testing, including major systems testing, as appropriate for the specific technology to establish its suitability to allow, in conjunction with other major equipment, subsequent Commercial Operation of the project in accordance with the design capacity of the resource and in accordance with Good Utility Practice. The test(s) shall include those conducted at the point at which the operation of the major equipment will be determined to be in compliance with the requirements of the engineering or purchase specifications.
- (g) **Commissioning**. In the New Capacity Qualification Package, the Project Sponsor must provide the date on which the project is expected to have demonstrated the level of performance specified in the New Capacity Show of Interest Form and in the New Capacity Qualification Package.
- (h) **Commercial Operation**. In the New Capacity Qualification Package, the Project Sponsor must provide the date by which the project is expected to achieve Commercial Operation. This date must be no later than the start of the Capacity Commitment Period associated with the Forward Capacity Auction.

### III.13.1.1.2.2.3. Offer Information.

(a) All New Generating Capacity Resources that might submit offers in the Forward Capacity Auction at prices below the relevant Offer Review Trigger Price must include in the New Capacity Qualification Package the lowest price at which the resource requests to offer capacity in the Forward Capacity Auction and supporting documentation justifying that price as competitive in light of the resource's costs (as described in Section III.A.21). This price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that Section.

- (b) The Project Sponsor for a New Generating Capacity Resource must indicate in the New Capacity Qualification Package if an offer from the New Generating Capacity Resource may be rationed. A Project Sponsor may specify a single MW quantity at or above the Economic Minimum Limit to which offers may be rationed. Without such indication, offers will only be accepted or rejected in whole. This rationing election shall apply for the entire Forward Capacity Auction.
- (c) By submitting a New Capacity Qualification Package, the Project Sponsor certifies that an offer from the New Generating Capacity Resource will not include any anticipated revenues the resource is expected to receive for its capacity cost as a Qualified Generator Reactive Resource pursuant to Schedule 2 the OATT.

### III.13.1.1.2.2.4. Capacity Commitment Period Election.

In the New Capacity Qualification Package, the Project Sponsor must specify whether, if its New Capacity Offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. If no such election is made in the New Capacity Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Capacity Offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Capacity Offer clears. If a New Capacity Offer clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.1.2.2.4.

# III.13.1.1.2.2.5. Additional Requirements for Resources Previously Counted As Capacity. In addition to the information described elsewhere in this Section III.13.1.1.2.2:

(a) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2 (re-powering), Section III.13.1.1.1.3 (incremental capacity), or Section III.13.1.1.1.4 (de-rated capacity), the Project Sponsor must include in the New Capacity Qualification Package documentation of the costs associated with the project in sufficient detail

to allow the ISO to determine that the relevant cost threshold (described in Sections III.13.1.1.1.2(b), III.13.1.1.1.3(b), and III.13.1.1.1.4) will be met.

- (b) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2(c) (environmental compliance), the Project Sponsor must include in the New Capacity Qualification Package: (i) a detailed description of the specific regulations that it is seeking to comply with and the permits that it must obtain; and (ii) documentation of the costs associated with the project in sufficient detail to allow the ISO to determine that the relevant cost threshold (described in Section III.13.1.1.1.2(c)) will be met.
- (c) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Sections III.13.1.1.1.2, III.13.1.1.1.3, or III.13.1.1.1.4, the Project Sponsor must include in the New Capacity Qualification Package detailed information showing how and when the resource will shed its Capacity Supply Obligation to accommodate necessary work on the facility, if necessary. The Project Sponsor must also include the shedding of its Capacity Supply Obligation as an additional milestone in the critical path schedule described in Section III.13.1.1.2.2.2.

# III.13.1.1.2.2.6. Additional Requirements for New Generating Capacity Resources that are Intermittent Power Resources and Intermittent Settlement Only Resources.

In addition to the information described elsewhere in this Section III.13.1.1.2.2, for each Intermittent Power Resource and Intermittent Settlement Only Resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must include in the New Capacity Qualification Package:

- (a) a claimed summer Qualified Capacity and a claimed winter Qualified Capacity based on the data described in Section III.13.1.1.2.2.6(b);
- (b) measured and recorded site-specific summer and winter data relevant to the expected performance of the Intermittent Power Resource and Intermittent Settlement Only Resource (including wind speed data for wind resources, water flow data for run-of-river hydropower resources, and irradiance data for solar resources) that, with the other information provided in the New Capacity Qualification Package, will enable the ISO to confirm the summer and winter Qualified Capacity that the Project Sponsor claims for the Intermittent Power Resource or the Intermittent Settlement Only Resource.

### III.13.1.1.2.3. Initial Interconnection Analysis.

- (a) For each New Generating Capacity Resource, the ISO shall perform an initial interconnection analysis, including an analysis of overlapping interconnection impacts, based on the information provided in the New Capacity Show of Interest Form and shall determine the amount of capacity that the resource could provide by the start of the associated Capacity Commitment Period. The initial interconnection analysis shall be performed consistent with the criteria and conditions described in ISO New England Planning Procedures, and will include, but will not be limited to, a power flow analysis and a short circuit analysis. No initial interconnection analysis is required where the total requested Qualified Capacity of a New Generating Capacity Resource pursuant to Sections III.13.1.1.2, III.13.1.1.3, III.13.1.1.4, or III.13.1.1.6 can be realized without a material change (as defined in Section 4.4 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff). The ISO will perform the initial interconnection analysis in the form of a group study that will include all the projects that have submitted a New Capacity Show of Interest Form to participate in the same Capacity Commitment Period (as described in Section 4.1 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff). Participation in an initial interconnection analysis is a requirement for obtaining Capacity Network Resource Interconnection Service in a manner that meets the Capacity Capability Interconnection Standard in accordance with the provisions in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff.
- (b) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide the entire amount of capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period, the New Generating Capacity Resource's Qualified Capacity values may be adjusted accordingly, as described in Section III.13.1.1.2.5.
- (c) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period and the New Generating Capacity Resource can not provide any capacity without those facilities and upgrades, the resource shall not be accepted for participation in the Forward Capacity Auction. In this case, the ISO will provide an explanation of its determination in the qualification determination notification, discussed in Section III.13.1.1.2.8.

- (d) If as a result of the initial interconnection analysis, the ISO determines that the New Generating Capacity Resource can provide all or some of the capacity indicated in the New Capacity Show of Interest Form by the start of the Capacity Commitment Period, and if the New Generating Capacity Resource is accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1, then in the qualification determination notification, discussed in Section III.13.1.1.2.8, the ISO, after consultation with the applicable Transmission Owner(s) as appropriate, shall include a list of the facilities that may be required to complete the interconnection and time required to construct those facilities by the start of the associated Capacity Commitment Period.
- (e) Where, as a result of the initial interconnection analysis, the ISO concludes, after consultation with the Project Sponsor and the applicable Transmission Owner(s), as appropriate, that the capacity indicated in the New Capacity Show of Interest Form can not be interconnected by the commencement of the Capacity Commitment Period, the Forward Capacity Market qualification process for that resource shall be terminated and the ISO will notify the Project Sponsor of such termination.
- (f) Where, as a result of the initial interconnection analysis, the ISO determines that because of overlapping interconnection impacts, New Generating Capacity Resources that are otherwise accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1 cannot provide the full amount of capacity that they each would otherwise be able to provide (in the absence of the other relevant Existing Generating Capacity Resources and New Generating Capacity Resources seeking to qualify for the Forward Capacity Auction), those New Generating Capacity Resources will be accepted for participation in the Forward Capacity Auction on the basis of their Queue Position, as described in Schedules 22 and 23 of Section II of the Transmission, Markets and Services Tariff, with priority given to resources that entered the queue earlier. Resources with lower priority in the queue may be accepted partially. Starting with the fourth auction, a New Generating Capacity Resource that meets the requirements of this Section III.13.1, but that would not be accepted for participation in the Forward Capacity Auction as a result of overlapping interconnection impacts with another resource having a higher priority in the queue may be accepted for participation in the Forward Capacity Auction as a Conditional Qualified New Generating Capacity Resource, as described in Section III.13.2.3.2(f), provided that the resource having a higher priority in the queue is not a resource offering capacity into the Forward Capacity Auction pursuant to Section III.13.2.3.2(e).

(g) New Generating Capacity Resources, or portions thereof, shall not be considered to have met their Capacity Supply Obligation for the purposes of this Forward Capacity Market and shall not receive compensation if any upgrades to be completed by the Project Sponsor required to remove overlapping interconnection impacts as identified in (f) have not been completed, including, any upgrades identified in a restudy pursuant to Section 3.2.1.3 of Schedule 22 and Section 1.7.1.3 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff and, if necessary, requests for the interconnection of an Elective Transmission Upgrade, in time for the Capacity Commitment Period unless the Capacity Supply Obligation is appropriately covered.

### III.13.1.1.2.4. Evaluation of New Capacity Qualification Package.

The ISO shall review a New Generating Capacity Resource's New Capacity Qualification Package consistent with the dates set forth in Section III.13.1.10, and shall determine whether the package is complete and whether, based on the information provided, the New Generating Capacity Resource is accepted for participation in the Forward Capacity Auction. In making these determinations, the ISO may consider, but is not limited to considering, the following:

- (a) whether the New Capacity Qualification Package contains all of the elements required by this Section III.13.1.1.2;
- (b) whether the critical path schedule includes all necessary elements and is sufficiently developed;
- (c) whether the milestones in the critical path schedule are reasonable and likely to be met;
- (d) whether, in the case of a resource previously counted as a capacity resource, the requirements for treatment as a New Generating Capacity Resource are satisfied; and
- (e) whether, in the case of an Intermittent Power Resource or Intermittent Settlement Only Resource, sufficient data for confirming the resource's claimed summer and winter Qualified Capacity is provided, and whether the data provided reasonably supports the claimed summer and winter Qualified Capacity.
- III.13.1.1.2.5. Qualified Capacity for New Generating Capacity Resources.
- III.13.1.1.2.5.1. New Generating Capacity Resources Other Than Intermittent Power Resources and Intermittent Settlement Only Resources.

The summer Qualified Capacity and winter Qualified Capacity of a New Generating Capacity Resource that is not an Intermittent Power Resource or an Intermittent Settlement Only Resource that has cleared in the Forward Capacity Auction shall be based on the data provided to the ISO during the qualification process, subject to ISO review and verification, and possibly as modified pursuant to Section III.13.1.1.2.3(b). The FCA Qualified Capacity for such a resource shall be the lesser of the resource's summer Qualified Capacity and winter Qualified Capacity, as adjusted to account for applicable offers composed of separate resources.

### III.13.1.1.2.5.2. [Reserved]

# III.13.1.1.2.5.3. New Generating Capacity Resources that are Intermittent Power Resources and Intermittent Settlement Only Resources.

The summer Qualified Capacity and winter Qualified Capacity of a New Generating Capacity Resource that is an Intermittent Power Resource or an Intermittent Settlement Only Resource shall be the summer Qualified Capacity and winter Qualified Capacity claimed by the Project Sponsor pursuant to Section III.13.1.1.2.2.6, as confirmed by the ISO pursuant to Section III.13.1.1.2.4(e). The FCA Qualified Capacity for such a resource shall be equal to the resource's summer Qualified Capacity, as adjusted to account for applicable offers composed of separate resources.

# III.13.1.1.2.5.4. New Generating Capacity Resources Partially Clearing in a Previous Forward Capacity Auction.

Where, as discussed in Section III.13.1.1.1.1(c), a New Generating Capacity Resource was accepted for participation in a previous Forward Capacity Auction, but cleared less than its summer or winter Qualified Capacity in that previous Forward Capacity Auction and is having its critical path schedule monitored by the ISO as described in Section III.13.3, its summer and winter Qualified Capacity as a New Generating Capacity Resource in the instant Forward Capacity Auction shall be the summer and winter Qualified Capacity from the previous Forward Capacity Auction minus the amount of capacity clearing from the New Generating Capacity Resource in the previous Forward Capacity Auction. The FCA Qualified Capacity for such a resource shall be the lesser of the resource's summer Qualified Capacity and winter Qualified Capacity, as adjusted to account for applicable offers composed of separate resources. The amount of capacity clearing in a Forward Capacity Auction from a New Generating Capacity Resource shall be treated as an Existing Generating Capacity Resource in subsequent Forward Capacity Auctions.

### III.13.1.1.2.6. [Reserved.]

### III.13.1.1.2.7. Opportunity to Consult with Project Sponsor.

In its review of a New Capacity Show of Interest Form or a New Capacity Qualification Package, the ISO may consult with the Project Sponsor to seek clarification, to gather additional necessary information, or to address questions or concerns arising from the materials submitted. At the discretion of the ISO, the ISO may consider revisions or additions to the qualification materials resulting from such consultation; provided, however, that in no case shall the ISO consider revisions or additions to the qualification materials if the ISO believes that such consideration cannot be properly accomplished within the time periods established for the qualification process. In addition, the ISO or the Project Sponsor may confer to seek clarification, to gather additional necessary information, or to address questions or concerns prior to the ISO's final determination and notification of qualification.

### III.13.1.1.2.8. Qualification Determination Notification for New Generating Capacity Resources.

No later than 127 days before the Forward Capacity Auction, the ISO shall send notification to Project Sponsors or Market Participants, as applicable, for each New Generating Capacity Resource indicating:

- (a) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the initial interconnection analysis made pursuant to Section III.13.1.1.2.3, and if not accepted, an explanation of the reasons the New Generating Capacity Resource was not accepted in the initial interconnection analysis;
- (b) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the New Capacity Qualification Package evaluation made pursuant to Section III.13.1.1.2.4, and if not accepted, an explanation of the reasons the New Generating Capacity Resource's New Capacity Qualification Package was not accepted;
- (c) if accepted for participation in the Forward Capacity Auction, a list of the facilities that may be required to complete the interconnection for purposes of providing capacity and time required to construct those facilities by the start of the associated Capacity Commitment Period, as discussed in Section III.13.1.1.2.3(d);

- (d) if accepted for participation in the Forward Capacity Auction, the New Generating Capacity Resource's summer Qualified Capacity and winter Qualified Capacity, as determined pursuant to Section III.13.1.1.2.5;
- (e) if accepted for participation in the Forward Capacity Auction, but subject to the provisions of Section III.13.1.1.2.3(f) (where not all New Generating Capacity Resources can be interconnected due to their combined effects on the New England Transmission System), a description of how the New Generating Capacity Resource shall participate in the Forward Capacity Auction, including, for the fourth and future auctions: (i) whether the resource shall participate as a Conditional Qualified New Generating Capacity Resource; (ii) for the notification to a Conditional Qualified New Generating Capacity Resource, the Queue Position of the associated resource with higher queue priority; and (iii) for the notification to a resource with higher queue priority than a Conditional Qualified New Generating Capacity Resource; the Queue Position of the Conditional Qualified New Generating Capacity Resource; and
- (f) if accepted for participation in the Forward Capacity Auction and requesting to submit offers at prices below the relevant Offer Review Trigger Price pursuant to Section III.13.1.1.2.2.3, the Internal Market Monitor's determination regarding whether the requested offer price is consistent with the long run average costs of that New Generating Capacity Resource.

### III.13.1.2. Existing Generating Capacity Resources.

An Existing Generating Capacity Resource, as defined in Section III.13.1.2.1, may participate in the Forward Capacity Auction pursuant to the provisions of this Section III.13.1.2.

### III.13.1.2.1. Definition of Existing Generating Capacity Resource.

Any resource that does not satisfy the criteria for participating in the Forward Capacity Auction as a New Generating Capacity Resource (Section III.13.1.1), as an Existing Import Capacity Resource or New Import Capacity Resource (Section III.13.1.3), or as a New Demand Resource or Existing Demand Resource (Section III.13.1.4) shall be an Existing Generating Capacity Resource.

- III.13.1.2.2. Qualified Capacity for Existing Generating Capacity Resources.
- III.13.1.2.2.1. Existing Generating Capacity Resources Other Than Intermittent Power Resources and Intermittent Settlement Only Resources.

### III.13.1.2.2.1.1. Summer Qualified Capacity.

The summer Qualified Capacity of an Existing Generating Capacity Resource that is not an Intermittent Power Resource or an Intermittent Settlement Only Resource shall be equal to the median of that Existing Generating Capacity Resource's summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in October of each year, with only positive summer ratings included in the median calculation. For the first Forward Capacity Auction, the summer Qualified Capacity of an Existing Generating Capacity Resource shall be equal to the median of that Existing Generating Capacity Resource's summer Seasonal Claimed Capability ratings from the most recent four years, as of the fifth Business Day in October of each year, with only positive summer ratings included in the median calculation. Where an Existing Generating Capacity Resource has fewer than five summer Seasonal Claimed Capability ratings, or in the case of the first Forward Capacity Auction, fewer than four summer Seasonal Claimed Capability ratings, then the summer Qualified Capacity for that Existing Generating Capacity Resource shall be equal to the median of all of that Existing Generating Capacity Resource's previous summer Seasonal Claimed Capability ratings, as of the fifth Business Day in October of each year, with only positive summer ratings included in the median calculation. If for an Existing Generating Capacity Resource there are no previous positive summer Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation, then the Existing Generating Capacity Resource's summer Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

#### III.13.1.2.2.1.2. Winter Qualified Capacity.

The winter Qualified Capacity of an Existing Generating Capacity Resource that is not an Intermittent Power Resource or an Intermittent Settlement Only Resource shall be equal to the median of that Existing Generating Capacity Resource's winter Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in June of each year, with only positive winter ratings included in the median calculation. For the first Forward Capacity Auction, the winter Qualified Capacity of an Existing Generating Capacity Resource's winter Seasonal Claimed Capability ratings from the most recent four years, as of the fifth Business Day in June of each year, with only positive winter ratings included in the median calculation. Where an Existing Generating Capacity Resource has fewer than five winter Seasonal Claimed Capability ratings, or in the case of the first Forward Capacity Auction, fewer than four winter Seasonal Claimed Capability ratings, then the winter Qualified Capacity for that Existing Generating Capacity Resource

shall be equal to the median of all of that Existing Generating Capacity Resource's previous winter Seasonal Claimed Capability ratings, as of the fifth Business Day in June of each year, with only positive winter ratings included in the median calculation. If for an Existing Generating Capacity Resource there are no previous positive winter Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation, then the Existing Generating Capacity Resource's winter Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

# III.13.1.2.2.2. Existing Generating Capacity Resources that are Intermittent Power Resources and Intermittent Settlement Only Resources.

Intermittent Power Resources and Intermittent Settlement Only Resources are defined as wind, solar, run of river hydro and other renewable resources that do not have control over their net power output. Wind and solar resources shall be qualified as Intermittent Power Resources or Intermittent Settlement Only Resources. The summer and winter Qualified Capacity for an Existing Generating Capacity Resource that is an Intermittent Power Resource or Intermittent Settlement Only Resource shall be calculated as follows:

# III.13.1.2.2.2.1. Summer Qualified Capacity for an Intermittent Power Resource and Intermittent Settlement Only Resource.

- (a) With regard to any Forward Capacity Auction, for each of the previous five summer periods, the ISO shall determine the median of the Intermittent Power Resource's and Intermittent Settlement Only Resource's net output in the Summer Intermittent Reliability Hours. If the Intermittent Power Resource or Intermittent Settlement Only Resource has not been in Commercial Operation for the requisite five full summer periods, the ISO shall determine the median of the Intermittent Power Resource's net output in each of the previous summer periods, or portion thereof if the Intermittent Power Resource or Intermittent Settlement Only Resource achieved Commercial Operation during a summer period. If the Intermittent Power Resource or Intermittent Settlement Only Resource began Commercial Operation after the 2006 summer period and prior to the first Forward Capacity Auction, its summer Qualified Capacity shall be established pursuant to Section III.13.1.1.2.2.6, as confirmed by the ISO pursuant to Section III.13.1.1.2.4(e).
- (b) The Intermittent Power Resource's or Intermittent Settlement Only Resource's summer Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.1(a).

- (c) The Summer Intermittent Reliability Hours shall be hours ending 1400 through 1800 each day of the summer period (June through September) and all summer period hours in which the ISO has declared a system-wide Shortage Event and if the Intermittent Power Resource or Intermittent Settlement Only Resource was in an import-constrained Capacity Zone, all Shortage Events in that Capacity Zone.
- (d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource or an Intermittent Settlement Only Resource there are no previous positive summer Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation, then the Existing Generating Capacity Resource's summer Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

# III.13.1.2.2.2.2. Winter Qualified Capacity for an Intermittent Power Resource and Intermittent Settlement Only Resources.

- (a) With regard to any Forward Capacity Auction, for each of the previous five winter periods, the ISO shall determine the median of the Intermittent Power Resource's and Intermittent Settlement Only Resource's net output in the Winter Intermittent Reliability Hours. If the Intermittent Power Resource or Intermittent Settlement Only Resource has not been in Commercial Operation for the requisite five full winter periods, the ISO shall determine the median of the Intermittent Power Resource's and Intermittent Settlement Only Resource's net output in each of the previous winter periods, or portion thereof if the Intermittent Power Resource or Intermittent Settlement Only Resource achieved Commercial Operation during a winter period.
- (b) The Intermittent Power Resource's and Intermittent Settlement Only Resource's winter Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.2(a).
- (c) The Winter Intermittent Reliability Hours shall be hours ending 1800 and 1900 each day of the winter period (October through May) and all winter period hours in which the ISO has declared a system-wide Shortage Event and if the Intermittent Power Resource or Intermittent Settlement Only Resource was in an import-constrained Capacity Zone, all Shortage Events in that Capacity Zone.
- (d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource or an Intermittent Settlement Only Resource there are no previous positive winter Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource has not yet achieved Commercial Operation,

then the Existing Generating Capacity Resource's winter Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

# III.13.1.2.2.3. Qualified Capacity Adjustment for Partially New and Partially Existing Resources.

- (a) Where an Existing Generating Capacity Resource is associated with a New Generating Capacity Resource that was accepted for participation in a previous Forward Capacity Auction qualification process and that cleared in a previous Forward Capacity Auction, then in each subsequent Forward Capacity Auction until the New Generating Capacity Resource achieves Commercial Operation the summer Qualified Capacity of that Existing Generating Capacity Resource shall be the sum of [the median of that Existing Generating Capacity Resource's positive summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day of October of each year, calculated in a manner consistent with Section III.13.1.2.2.1.1] plus [the amount of the New Generating Capacity Resource's capacity clearing in previous Forward Capacity Auctions]. After the New Generating Capacity Resource's summer Qualified Capacity shall be calculated as described in Section III.13.1.2.2.1.1, except that no data from the time period prior to the New Generating Capacity Resource's Commercial Operation date shall be used to determine the summer Qualified Capacity associated with the Existing Generating Capacity Resource.
- (b) Where an Existing Generating Capacity Resource is associated with a New Generating Capacity Resource that was accepted for participation in a previous Forward Capacity Auction qualification process and that cleared in a previous Forward Capacity Auction, then in each subsequent Forward Capacity Auction until the New Generating Capacity Resource achieves Commercial Operation the winter Qualified Capacity of that Existing Generating Capacity Resource shall be the sum of [the median of that Existing Generating Capacity Resource's positive winter Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day of June of each year, calculated in a manner consistent with Section III.13.1.2.2.1.2] plus [the amount of the New Generating Capacity Resource's capacity clearing in previous Forward Capacity Auctions]. After the New Generating Capacity Resource achieves Commercial Operation, the Existing Generating Capacity Resource's winter Qualified Capacity shall be calculated as described in Section III.13.1.2.2.1.2, except that no data from the time period prior to the New Generating Capacity Resource's Commercial Operation date shall be used to determine the winter Qualified Capacity associated with the Existing Generating Capacity Resource.

# III.13.1.2.2.4. Adjustment for Significant Decreases in Capacity Prior to the Existing Capacity Qualification Deadline.

Where the most recent summer Seasonal Claimed Capability, as of the fifth Business Day in October, of an Existing Generating Capacity Resource that is not a Settlement Only Resource, Intermittent Power Resource, or Intermittent Settlement Only Resource is below its summer Qualified Capacity, as determined pursuant to Section III.13.1.2.2.1.1, by more than the lesser of 20 percent of that summer Qualified Capacity or 40 MW, then the Lead Market Participant must elect one of the three treatments described in this Section III.13.1.2.2.4 by the Existing Capacity Qualification Deadline. If the Lead Market Participant makes no election, or elects treatment pursuant to Section III.13.1.2.2.4(b) or Section III.13.1.2.2.4(c) and fails to meet the associated requirements, then the treatment described in Section III.13.1.2.2.4(a) shall apply.

- (a) A Lead Market Participant may elect, for the purposes of the Forward Capacity Auction only, to have the Existing Generating Capacity Resource's summer Qualified Capacity set to the most recent summer Seasonal Claimed Capability as of the fifth Business Day in October, provided that the Lead Market Participant has furnished evidence regarding the cause of the de-rating.
- (b) A Lead Market Participant may elect: (i) to submit a Static De-List Bid or a Permanent De-List Bid for the difference between the summer Qualified Capacity calculated pursuant to Section III.13.1.2.2.1.1 and the most recent summer Seasonal Claimed Capability as of the fifth Business Day in October; and (ii) to have the Existing Generating Capacity Resource's summer Qualified Capacity remain as calculated pursuant to Section III.13.1.2.2.1.1 for the Forward Capacity Auction.
- (c) A Lead Market Participant may elect: (i) to submit a critical path schedule as described in Section III.13.1.1.2.2.2, modified as appropriate, describing the measures that will be taken and showing that the Existing Generating Capacity Resource will be able to provide an amount of capacity consistent with the summer Qualified Capacity as calculated pursuant to Section by the start of the relevant Capacity Commitment Period; and (ii) to have the Existing Generating Capacity Resource's summer Qualified Capacity remain as calculated pursuant to Section for the Forward Capacity Auction. For an Existing Generating Capacity Resource subject to this election, the critical path schedule monitoring provisions of Section III.13.3 shall apply.

### III.13.1.2.2.5. Adjustment for Certain Significant Increases in Capacity.

Where an Existing Generating Capacity Resource that is not a Settlement Only Resource, meets the requirements of Section III.13.1.1.1.3(a) but not the requirements of Section III.13.1.1.1.3(b), the Lead Market Participant may elect to have the Existing Generating Capacity Resource's summer Qualified Capacity be the sum of [the median of that Existing Generating Capacity Resource's positive summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in October of each year, calculated in a manner consistent with Section III.13.1.2.2.1.1] plus [the amount of incremental capacity as described in Section III.13.1.1.3(a)]; provided, however, that the Lead Market Participant must abide by all other provisions of this Section III.13 applicable to a resource that is a New Generating Capacity Resource pursuant to Section III.13.1.1.1.3. Such an election must be made in writing and must be received by the ISO no later than 10 Business Days before the Existing Capacity Qualification Deadline.

### III.13.1.2.2.5.1. [Reserved.]

III.13.1.2.2.5.2. Requirements for an Existing Generating Capacity Resource, Existing

Demand Resource or Existing Import Capacity Resource Having a Higher

Summer Qualified Capacity than Winter Qualified Capacity.

Where an Existing Generating Capacity Resource, Existing Demand Resource, or Existing Import Capacity Resource (other than an Intermittent Power Resource or an Intermittent Settlement Only Resource) has a summer Qualified Capacity that exceeds, by the threshold specified below, its winter Qualified Capacity, both as calculated pursuant to this Section III.13.1.2.2, then that resource must either: (i) offer its summer Qualified Capacity as part of an offer composed of separate resources, as discussed in Section III.13.1.5; or (ii) submit a Static De-List Bid or a Permanent De-List Bid in an Existing Capacity Qualification Package for at least the difference between the summer Qualified Capacity and the winter Qualified Capacity, at the Forward Capacity Auction Starting Price. If the Lead Market Participant makes no election, the ISO shall submit a Static De-List Bid on behalf of the resource (with all payments, charges, rights, obligations, and other results associated with such bid applying to the resource as if the resource itself had submitted the bid) for the difference between the resource's summer Qualified Capacity and the winter Qualified Capacity at the Forward Capacity Auction Starting Price. The Internal Market Monitor shall review each bid made pursuant to this Section III.13.1.2.2.5.2, and if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)). Bids made pursuant to this Section III.13.1.2.2.5.2 shall be subject to a reliability review as described in Section

III.13.2.5.2.5, as required. This Section III.13.1.2.2.5.2 shall not apply if the summer Qualified Capacity of a resource is greater than the winter Qualified Capacity of that resource by less than the lesser of: (i) 2 MW, or (ii) two percent of the summer Qualified Capacity of that resource.

### III.13.1.2.3. Qualification Process for Existing Generating Capacity Resources.

For each Existing Generating Capacity Resource, no later than 15 Business Days before the Existing Capacity Qualification Deadline, the ISO will notify the resource's Lead Market Participant of the resource's summer Qualified Capacity and winter Qualified Capacity and the Load Zone in which the Existing Generating Capacity Resource is located. If the Lead Market Participant believes that an ISO-determined summer Qualified Capacity or winter Qualified Capacity for an Existing Generating Capacity Resource does not accurately reflect the determination described in Section III.13.1.2.2, then the Lead Market Participant must notify the ISO within 5 Business Days of receipt of the Qualified Capacity notification. The ISO shall notify the Lead Market Participant of the outcome of any such challenge no later than 5 Business Days before the Existing Capacity Qualification Deadline. If an Existing Generating Capacity Resource does not submit a Static De-List Bid, an Export Bid, an Administrative Export De-List Bid, or a Permanent De-List Bid in the Forward Capacity Auction qualification process, then the resource shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c).

### III.13.1.2.3.1. Existing Capacity Qualification Package.

A resource that previously has been deactivated pursuant Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and seeks to reactivate and participate in the Forward Capacity Market as an Existing Generating Capacity Resource must submit a reactivation plan no later than 10 Business Days before the Existing Capacity Qualification Deadline, as described in Section III.13.1.1.1.6(b). All Static De-List Bids, Export Bids, Administrative Export De-List Bids, and Permanent De-List Bids in the Forward Capacity Auction must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, as described in this Section III.13.1.2.3.1. All Static De-List Bids, Permanent De-List Bids, Export Bids, and Administrative Export De-List Bids submitted in the qualification process may not be modified or withdrawn after the Existing Capacity Qualification Deadline, and if accepted by the ISO shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). An Existing Generating Capacity Resource may not submit a Static De-List Bid, Export Bid, Administrative Export De-List Bid, or Permanent De-List Bid for an amount of capacity greater than its summer Qualified Capacity. Where a resource elected pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.2.2.5 to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period

associated with the Forward Capacity Auction in which the offer clears, the capacity associated with any resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply. For a single resource, a Lead Market Participant may combine a Static De-List Bid, an Export Bid, and an Administrative Export De-List Bid; a Permanent De-List Bid may not be combined with any other type of de-list or export bid. All Static De-List Bids and Permanent De-List Bids submitted under Section III.13.1.2.2.4(b) associated with a significant decrease in capacity must be identified in the Existing Capacity Qualification Package.

Static De-List Bids, Export Bids and Permanent De-List Bids may elect to be rationed (as described in Section III.13.2.6, however, an Export Bid is always subject to potential rationing where the associated external interface binds). Where a Lead Market Participant submits any combination of Static De-List Bid and Export Bid for a single resource, each of those bids must have the same rationing election. Where a Lead Market Participant submits any combination of Static De-List Bid, Export Bid, and Administrative Export De-List Bid for a single resource, none of the prices in a set of price-quantity pairs associated with a bid may be the same as any price in any other set of price-quantity pairs associated with another bid for the same resource.

### III.13.1.2.3.1.1. Static De-List Bids.

An Existing Generating Capacity Resource, or a portion thereof, seeking to opt out of the capacity market at prices at or above \$1.00/kW-month during a single Capacity Commitment Period may submit a Static De-List Bid in the associated Forward Capacity Auction. A Static De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. Each Static De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five price-quantity pairs) associated with a specific Existing Generating Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. All Static De-List Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Static De-List Bids are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional documentation described in that section. With the submission of a Static De-List Bid, the Existing Generating Capacity Resource must notify the ISO if the resource will not be participating in the energy and ancillary services

markets during the Capacity Commitment Period (except for necessary audits or tests). Static De-List Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).

#### III.13.1.2.3.1.2. Permanent De-List Bids.

An Existing Generating Capacity Resource seeking to opt out of the capacity market permanently beginning at the start of a particular Capacity Commitment Period may submit a Permanent De-List Bid in the associated Forward Capacity Auction. A Permanent De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits a Permanent De-List Bid for the resource's full summer Qualified Capacity. Each Permanent De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five pricequantity pairs) associated with a specific Existing Generating Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. All Permanent De-List Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Permanent De-List Bids above \$1.00/kW-month are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional documentation described in that section. With the submission of a Permanent De-List Bid, the Existing Generating Capacity Resource must notify the ISO if the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period and thereafter. Permanent De-List Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b). A resource whose Permanent De-List Bid clears in the Forward Capacity Auction is precluded from subsequent participation in the Forward Capacity Market unless it qualifies as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2.

### **III.13.1.2.3.1.3. Export Bids.**

An Existing Generating Capacity Resource within the New England Control Area other than an Intermittent Power Resource or an Intermittent Settlement Only Resource seeking to export all or part of its capacity during a Capacity Commitment Period may submit an Export Bid in the associated Forward Capacity Auction. An Export Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. All Export Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Export Bids above \$1.00/kW-month are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional information described in that Section. Each Export Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form

of a curve (up to five price-quantity pairs) associated with a specific Existing Generating Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. Each price-quantity pair must be less than the Forward Capacity Auction Starting Price. The Existing Capacity Qualification Package for each Export Bid must also specify the interface over which the capacity will be exported. Export Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).

### III.13.1.2.3.1.4. Administrative Export De-List Bids.

An Existing Generating Capacity Resource other than an Intermittent Power Resource or an Intermittent Settlement Only Resource subject to a multiyear contract to sell capacity outside of the New England Control Area during the Capacity Commitment Period that either: (i) cleared as an Export Bid in a previous Forward Capacity Auction for a Capacity Commitment Period within the duration of the contract; or (ii) entered into a contract prior to April 30, 2007 to sell capacity outside of the New England Control Area during the Capacity Commitment Period, may submit an Administrative Export De-List Bid in the associated Forward Capacity Auction. An Administrative Export De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Economic Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. Unless reviewed as an Export Bid in a previous Forward Capacity Auction, an Administrative Export De-List Bid is subject to a reliability review prior to clearing in a Forward Capacity Auction, as described in Section III.13.2.5.2.5, and is subject to review by the Internal Market Monitor in the first Forward Capacity Auction in which it participates, pursuant to Section III.13.1.7. Both the reliability review and the review by the Internal Market Monitor shall be conducted once and shall remain valid for the multiyear contract period. Each Administrative Export De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, must be associated with a specific Existing Generating Capacity Resource, and must indicate the quantity of capacity subject to the bid. The Existing Capacity Qualification Package for each Administrative Export De-List Bid must also specify the interface over which the capacity will be exported, and must include documentation demonstrating a contractual obligation to sell capacity outside of the New England Control Area during the whole Capacity Commitment Period. Administrative Export De-List Bids, if accepted, shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).

### III.13.1.2.3.1.5. Non-Price Retirement Request

#### III.13.1.2.3.1.5.1. Description of Non-Price Retirement Request.

A Non-Price Retirement Request is a binding request to retire all or part of a Generating Capacity Resource. Non-Price Retirement Requests will be approved subject to review for reliability impacts under Section III.13.2.5.2.5. Even if not approved, a resource that has submitted a Non-Price Retirement Request may retire in whole or in part, as applicable, pursuant to Section III.13.2.5.2.5.3(a)(iii). Once submitted, a Non-Price Retirement Request may not be withdrawn. A Non-Price Retirement Request supersedes any prior de-list bid for the same Capacity Commitment Period.

#### III.13.1.2.3.1.5.2. Timing Requirements.

The request must be submitted to the ISO between the Existing Capacity Qualification Deadline and 120 days prior to the date of the relevant Forward Capacity Auction. In the case of a resource that has a Permanent De-List Bid rejected by the Internal Market Monitor, a Non-Price Retirement Request may be submitted within 14 days after the resource receives notice of the rejection or 120 days prior to the date of the relevant Forward Capacity Auction, whichever is later.

#### III.13.1.2.3.1.5.3. Reliability Review of Non-Price Retirement Requests.

The ISO will review a Non-Price Retirement Request pursuant to Section III.13.2.5.2.5 to determine if the resource is needed for reliability. If the Non-Price Retirement Request is rejected for reliability reasons and the resource elects not to proceed with retirement as provided in Section III.13.2.5.2.5.3(a)(iii), and the resource remains in operation to meet the reliability need, the resource will be compensated pursuant to Section III.13.2.5.2.5.1(c). Upon resolution of the reliability issue, the Non-Price Retirement Request will be approved and the resource, or portion thereof, as applicable, will retire pursuant to Section III.13.1.2.3.1.5.4.

#### III.13.1.2.3.1.5.4. Obligation to Retire.

A Generating Capacity Resource, or portion thereof, with an approved Non-Price Retirement Request will be retired as described in Section III.13.2.5.2.5.3(a) unless, in the case of a Generating Capacity Resource that had its Non-Price Retirement Request rejected for reliability reasons, the Commission directs that the obligation to retire be removed or the retirement date extended as part of an Incremental Cost of Reliability Service filing made pursuant to Section III.13.2.5.2.5.2.

# III.13.1.2.3.1.6. Static De-List Bids and Permanent De-List Bids for Existing Generating Capacity Resources at Stations having Common Costs.

Where Existing Generating Capacity Resources at a Station having Common Costs elect to submit Static De-List Bids or Permanent De-List Bids, the provisions of this Section III.13.1.2.3.1.6 shall apply.

#### III.13.1.2.3.1.6.1. Submission of Cost Data.

In addition to the information required elsewhere in this Section III.13.1.2.3, Static De-List Bids or Permanent De-List Bids submitted by an Existing Generating Capacity Resource that is associated with a Station having Common Costs and seeking to delist must include detailed cost data to allow the ISO to determine the Asset-Specific Going Forward Costs for each asset associated with the Station and the Station Going Forward Common Costs.

#### III.13.1.2.3.1.6.2. [Reserved.]

#### III.13.1.2.3.1.6.3. Internal Market Monitor Review.

The Internal Market Monitor will review each Static De-List Bid and Permanent De-List Bid from an Existing Generating Capacity Resource that is associated with a Station having Common Costs pursuant to the following methodology:

- (i) Calculate the average Asset-Specific Going Forward Costs of each asset at the Station.
- (ii) Order the assets from highest average Asset-Specific Going Forward Costs to lowest average Asset-Specific Going Forward Costs; this is the preferred de-list order.
- (iii) Calculate and assign to each asset a station cost that is equal to the average cost of the assets remaining at the Station, including Station Going Forward Common Costs, assuming the successive delisting of each individual asset in preferred de-list order.
- (iv) Calculate a set of composite costs that is equal to the maximum of the cost associated with each asset as calculated in (i) and (iii) above.

The Internal Market Monitor will adjust the set of composite costs to ensure a monotonically non-increasing set of bids as follows: any asset with a composite cost that is greater than the composite cost of the asset with the lowest composite cost and that has average Asset-Specific Going Forward Costs that are less than its composite costs will have its composite cost set equal to that of the asset with the lowest composite cost. The bids of the asset with the lowest composite cost and of any assets whose composite

costs are so adjusted will be considered a single non-rationable bid for use in the Forward Capacity Auction.

The Internal Market Monitor will compare a de-list bid developed using the adjusted composite costs to the de-list bid submitted by the Existing Generating Capacity Resource that is associated with a Station having Common Costs. If the Internal Market Monitor determines that the submitted de-list bid is less than or equal to the bid developed using the adjusted composite costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). If the Internal Market Monitor determines that the submitted de-list bid is greater than the bid developed using the adjusted composite costs or is not consistent with the submitted supporting cost data, then the Internal Market Monitor will reject the bid as described in Section III.13.1.2.3.2.1.1.

### III.13.1.2.3.2. Review by Internal Market Monitor of Bids from Existing Generating Capacity Resources.

### III.13.1.2.3.2.1. Static De-List Bids, Export Bids Above \$1.00/kW-month, and Permanent De-List Bids Above \$1.00/kW-month.

The Internal Market Monitor shall review each Static De-List Bid, each Export Bid above \$1.00/kW-month, and each Permanent De-List Bid above \$1.00/kW-month to determine whether the bid is consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward costs (as determined pursuant to Section III.13.1.2.3.2.1.1) and opportunity costs (as determined pursuant to Section III.13.1.2.3.2.1.2). Sufficient documentation and information must be included in the Existing Capacity Qualification Package to allow the Internal Market Monitor to make such determinations. Any Existing Generating Capacity Resource submitting a Static De-List, Permanent De-List Bid, or Export Bid shall report costs using ISO spreadsheets and forms provided, and may supplement this information with other evidence as deemed necessary. The entire de-list submittal shall be accompanied by an affidavit executed by a corporate officer attesting to the accuracy of the reported costs and the reasonableness of the estimates and adjustments of costs that would otherwise be avoided if the resource were not required to meet the obligations of a listed resource, and shall be subject to audit upon request by the ISO.

#### III.13.1.2.3.2.1.1. Internal Market Monitor Review of De-List Bids.

The Internal Market Monitor may seek additional information from the Lead Market Participant after the qualification deadline to address any questions or concerns regarding the data submitted, as appropriate.

#### III.13.1.2.3.2.1.1.1. Review of Permanent De-List Bids and Export Bids.

In the case of a Permanent De-List Bid or an Export Bid, if the Internal Market Monitor determines that the bid is consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward and opportunity costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). If the Internal Market Monitor determines, after due consideration and consultation with the Lead Market Participant, as appropriate, that the bid is not consistent with the resource's net risk-adjusted going forward and opportunity costs, then the bid will be rejected. Where a de-list bid is rejected pursuant to this Section III.13.1.2.3.2.1.1.1, both the qualification determination notification described in Section III.13.1.2.4 and the informational filing made to the Commission as described in Section III.13.8.1(a) shall include an explanation of the reasons that the de-list bid was rejected based on the Internal Market Monitor review and the resource's net risk- adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor. The Lead Market Participant for such a resource may elect to have the ISO-determined bid entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b) by so indicating in a filing with the Commission in response to the informational filing described in Section III.13.8.1(a). Such a filing, and notification to the ISO of any such election, shall be made in accordance with the terms of Section III.13.8.1(b) and shall not limit the other rights provided under that section. A Lead Market Participant making such an election shall be prohibited from challenging pursuant to Section III.13.8.1(b) the Internal Market Monitor's determinations regarding the resource's net risk-adjusted going forward costs and opportunity costs. If no such election is made, the Existing Generating Capacity Resource will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c) or as otherwise directed by the Commission. In no case shall rejection of a de-list bid by the Internal Market Monitor restrict the ability of the resource to dynamically de-list at prices below \$1.00/kW-month.

#### III.13.1.2.3.2.1.1.2. Review of Static De-List Bids.

(a) In the case of a Static De-List Bid, if the Internal Market Monitor determines that the bid is consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward and opportunity costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b); provided however, that no later than 7 days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.2.4, the Lead Market Participant may elect to: (i) withdraw the Static De-List Bid entirely, in which case the Existing Generating Capacity Resource will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c); or (ii) submit revised prices for the Static De-List Bid for the resource at

prices equal to or less than the highest price indicated in the initial Static De-List Bid as approved by the Internal Market Monitor and greater than \$1.00/kW-month. Where revised prices are submitted, the Static De-List Bid must nonetheless comply with the requirements of Section III.13.1.2.3.1.1. In no case shall withdrawal of a Static De-List Bid pursuant to this subsection restrict the ability of the resource to dynamically de-list at prices below \$1.00/kW-month.

(b) In the case of a Static De-List Bid, if the Internal Market Monitor determines, after due consideration and consultation with the Lead Market Participant, as appropriate, that the bid is not consistent with the resource's net risk-adjusted going forward and opportunity costs, then the bid will be rejected. Where a de-list bid is rejected pursuant to this Section III.13.1.2.3.2.1.1.2(b), both the qualification determination notification described in Section III.13.1.2.4 and the informational filing made to the Commission as described in Section III.13.8.1(a) shall include an explanation of the reasons that the de-list bid was rejected based on the Internal Market Monitor review and the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor. In such a case, no later than 7 days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.2.4, the Lead Market Participant may elect to submit revised prices for the Static De-List Bid for the resource at prices equal to or less than the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor and greater than \$1.00/kW-month. Where revised prices are submitted, the Static De-List Bid must nonetheless comply with the requirements of Section III.13.1.2.3.1.1. A Lead Market Participant making such an election shall be prohibited from challenging pursuant to Section III.13.8.1(b) the Internal Market Monitor's determinations regarding the resource's net risk-adjusted going forward costs and opportunity costs. If no such election is made, the Existing Generating Capacity Resource will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c) or as otherwise directed by the Commission. If no such election is made, and the Existing Generating Capacity Resource is entered into the Forward Capacity Auction as described in Section III.13.2.3.2(c), then nothing in this subsection shall restrict the ability of the resource to dynamically de-list at prices below \$1.00/kW-month.

#### III.13.1.2.3.2.1.2. Net Risk-Adjusted Going Forward Costs.

A Static De-List Bid, Export Bid above \$1.00/kW-month, or Permanent De-List Bid above \$1.00/kW-month shall be considered consistent with the Existing Generating Capacity Resource's net risk-adjusted going forward costs based on a review of the data submitted in the following formula. To the extent

possible, all costs and operational data used in this calculation shall be the cumulative actual data for the Existing Generating Capacity Resource from the most recent full Capacity Commitment Period available.

$$\underbrace{\left[\begin{array}{c|c} GFC \\ \bullet A \end{array}\right] + \begin{array}{c} FF \end{array} \begin{array}{c} \bullet \\ \bullet \\ \bullet \\ \bullet \end{array} \begin{array}{c} \bullet \\ \bullet \\ \bullet \end{array} \begin{array}{c} \bullet \\ \bullet \\ \bullet \\ \bullet \end{array} \begin{array}{c} \bullet \\ \bullet \\ \bullet \\ \bullet \end{array} \begin{array}{c} \bullet \\ \bullet \\ \bullet \\ \bullet \end{array} \begin{array}$$

Where:

GFC = annual going forward costs, in dollars. These are costs that might otherwise be avoided or not incurred if the resource were not subject to the obligations of a listed capacity resource during the Capacity Commitment Period (i.e., maintaining a constant condition of being ready to respond to commitment and dispatch orders). Costs that are not avoidable in a single Capacity Commitment Period and costs associated with the production of energy are not to be included. Service of debt is not a going forward cost. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only in the absence of a Capacity Supply Obligation may be included. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only if the resource were not participating in the energy and ancillary services markets may not be included, except in the case of a resource that has indicated in the submission of a Static De-List Bid or Permanent De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period (and thereafter, in the case of a Permanent De-List Bid). These costs shall be reported to the ISO using the spreadsheet provided on the ISO website by any Existing Generating Capacity Resource submitting a Static De-List, Permanent De-List Bid, or Export Bid, shall be accompanied by a signed affidavit, and shall be subject to audit upon request by the ISO. To the extent that the Capacity Commitment Period data used to calculate these data do not reflect known and measurable costs that would or are likely to be incurred in the relevant Capacity Commitment Period, the Internal Market Monitor shall also consider adjustments submitted, provided the costs are based on known and measurable conditions and supported by appropriate documentation to reflect those costs.

 $CQ_{Summer}kW$  = capacity seeking to de-list in kW. In no case shall this value exceed the resource's summer Qualified Capacity.

RF = risk factor, in dollars. This value shall be calculated using the following formula:

 $RF = [(RPC \ x \ EFORd) + (P \ x \ (Forward \ Capacity \ Auction \ Starting \ Price - AFCAP) \ x \ 12,months)] \ x \ CQ_{Summer}kW$ 

Provided: If EFORd is greater than 0.40 then 0.40 shall be used, and if EFORd is less than 0.05 then 0.05 shall be used.

EFORd shall be for the corresponding period used in quantifying going forward costs and shall be calculated using reported availability data (GADS) for the Existing Generating Capacity Resource.

RPC = replacement power costs rate, in dollars/kW. As soon as practicable, this value shall be determined by the ISO by comparing the PER Proxy Unit's daily price to the resource's Real-Time nodal price. For each hour that the resource's nodal price exceeds the PER Proxy Unit's daily price, the RPC rate for that hour will be the difference between the nodal price and the PER Proxy Unit's daily price. For each Capacity Commitment Period, the annual RPC rate will then be the sum of all hourly RPC values. The RPC rate used in the RF equation shall then be the average of the annual RPC rates for the three most recent Capacity Commitment Periods. The Lead Market Participant may specify two of the three years to be averaged. Upon exercising such option, the RPC value used shall be an average of the RPC values for the two years selected, provided however that if the Lead Market Participant selects two of three years for the PER values, the same years must be selected for the PER values for both calculations.

P = Probability estimate of a significant decrease in capacity as specified in Section III.13.4.2.1.3 occurring after the de-list bid submittal deadline and before the last annual reconfiguration auction prior to the Capacity Commitment Period. This estimate shall be no greater than the EFORd of the resource for the corresponding period used in quantifying going forward costs, and in no case greater than 0.40. The Lead Market Participant is required to provide an explanation of the derivation of the probability estimate.

AFCAP = Average FCA Price, in \$/kWmo. This value shall be the average of the last three Forward Capacity Auction clearing prices in the resource's Capacity Zone.

AA = availability adjustment. AA = (1 - EFORd)

Provided: If EFORd is greater than 0.40 then 0.40 shall be used, and if EFORd is less than 0.05 then 0.05 shall be used.

EFORd shall be for the corresponding period used in quantifying going forward costs and shall be calculated using reported availability data (GADS) for the Existing Generating Capacity Resource.

IMR = annual infra-marginal rents, in dollars. In the case of a resource that has indicated in the submission of a Static De-List Bid or Permanent De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period (and thereafter, in the case of a Permanent De-List Bid), this value shall be calculated by subtracting all submitted cost data representing the cumulative actual cost of production (total expenses related to the production of energy, e.g. fuel, actual consumables such as chemicals and water, and, if quantified, incremental labor and maintenance) from the Existing Generating Capacity Resource's total ISO market revenues. In the case of a resource that has not indicated in the submission of a Static De-List Bid or Permanent De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period, this value shall be \$0.00. As soon as practicable, the resource's total ISO market revenues used in this calculation shall be calculated by the ISO and available to the Lead Market Participant upon request.

PER = resource-specific annual peak energy rents, in dollars. As soon as practicable, this value shall be calculated by the ISO and available to the Lead Market Participant upon request.

At the option of the Lead Market Participant, the cumulative production costs for each of the most recent three Capacity Commitment Periods may be submitted and the annual infra-marginal rents calculated for each year. The Lead Market Participant may then specify two of the three years to be averaged and subsequently used as the IMR value. Upon exercising such option, the PER value used shall be an average of the PER values for the two years selected

InfIndex = inflation index. infIndex =  $(1 + i)^4$ 

Where: "i" is the most recent reported 1-Year Constant Maturity Treasury Rate at the beginning of the qualification period. The specific value to be used shall be specified by the ISO and available to the Lead Market Participant.

#### III.13.1.2.3.2.1.3. Opportunity Costs.

To the extent that an Existing Generating Capacity Resource submitting a Static De-List Bid, Export Bid above \$1.00/kW-month, or Permanent De-List Bid above \$1.00/kW-month has opportunity costs that

support a de-list or export bid that exceeds the thresholds described in Section III.13.1.2.3.1, the Lead Market Participant must include in the Existing Capacity Qualification Package evidence supporting such costs. Any risk that can be quantified and analytically supported and that is not already reflected in the formula for net risk-adjusted going forward costs described in Section III.13.1.2.3.2.1.2 may be included as an opportunity cost. Opportunity costs associated with major repairs necessary to restore decreases in capacity as described in Section III.13.1.2.2.4, capital projects required to operate the plant as a capacity resource or other uses of the resource shall be considered, provided such costs are substantiated by evidence of a repair plan, documented business plan and fundamental market analysis, or other independent and transparent trading index or indices as applicable. Substantiation of opportunity costs relying on sales in reconfiguration auctions or risk aversion premiums shall not be considered sufficient justification. The ISO will consider evidence of opportunity costs described in this Section III.13.1.2.3.2.1.3, and if the ISO determines that the opportunity costs justify a de-list bid or export bid above the threshold described in Section III.13.1.2.3.1, the bid will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b).

#### III.13.1.2.3.2.2. [Reserved.]

#### III.13.1.2.3.2.3. Administrative Export De-List Bids.

The Internal Market Monitor shall review each Administrative Export De-List Bid associated with a multi-year contract entered into prior to April 30, 2007 in the first Forward Capacity Auction in which it clears. An Administrative Export De-List Bid shall be rejected if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, and the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)).

### III.13.1.2.3.2.4. Static De-List Bids for Reductions in Ratings Due to Ambient Air Conditions.

A Lead Market Participant may submit a Static De-List Bid for up to the megawatt amount that the Lead Market Participant expects will not be physically available due to the difference between the summer Qualified Capacity at 90 degrees and the expected rating of the resource at 100 degrees. The ISO shall verify during the qualification process that the rating is accurate. Such Static De-List Bids may be entered into the Forward Capacity Market at prices up to and including the Forward Capacity Auction Starting Price, subject to validation of the physical limit. Static De-List Bids for reductions in ratings due to

ambient air conditions shall not be subject to the review described in Section III.13.1.2.3.2 and need not include documentation for that purpose.

#### III.13.1.2.3.2.5. Incremental Capital Expenditure Recovery Schedule.

Except as described below, the Internal Market Monitor shall review all de-list bids using the following cost recovery schedule for incremental capital expenditures, which assumes an annual pre-tax weighted average cost of capital of 10 percent.

|                  |                | Annual Rate of      |
|------------------|----------------|---------------------|
| Age of Existing  | Remaining Life | <b>Capital Cost</b> |
| Resource (years) | (years)        | Recovery            |
| 1 to 5           | 30             | 0.106               |
| 6 to 10          | 25             | 0.110               |
| 11 to 15         | 20             | 0.117               |
| 16 to 20         | 15             | 0.131               |
| 21 to 25         | 10             | 0.163               |
| 25 plus          | 5              | 0.264               |

A Market Participant may request that a different pre-tax weighted average cost of capital be used to determine the resource's annual rate of capital cost recovery by submitting the request, along with supporting documentation, in the Existing Capacity Qualification Package. The Internal Market Monitor shall review the request and supporting documentation and may, at its sole discretion, replace the annual rate of capital cost recovery from the table above with a resource-specific value based on an adjusted pre-tax weighted average cost of capital. If the Internal Market Monitor uses an adjusted pre-tax weighted average cost of capital for the resource, then the resource's annual rate of capital cost recovery will be determined according to the following formula:

$$\frac{Cost\ Of\ Capital}{(1-(1+CostOfCapital)^{-RemainingLife})}$$

Where:

Cost Of Capital = the adjusted pre-tax weighted average cost of capital.

Remaining Life = the remaining life of the existing resource, based on the age of the resource, as indicated in the table above.

#### III.13.1.2.4. Qualification Determination Notification for Existing Capacity.

No later than 127 days before the Forward Capacity Auction, the ISO shall send notification to the Lead Market Participant that submitted each Static De-List Bid, Permanent De-List Bid, Export Bid, and Administrative Export De-List Bid indicating whether the bid has been accepted for participation in the Forward Capacity Auction. Each accepted Static De-List Bid, Permanent De-List Bid, Export Bid, and Administrative Export De-List Bid shall be binding and shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). Where a Static De-List Bid, Permanent De-List Bid, Export Bid, or Administrative Export De-List Bid is not accepted for participation in the Forward Capacity Auction as a result of the Internal Market Monitor's review pursuant to Section III.13.1.2.3.2, the notification shall include an explanation of the reasons the Existing Capacity Qualification Package was not accepted and shall include the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitor. The qualification determination shall not include the results of the reliability review subject to Section III.13.2.5.2.5.

# III.13.1.2.5. Optional Existing Capacity Qualification Package for New Generating Capacity Resources Previously Counted as Capacity.

A resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2 (resources previously counted as capacity resources) may elect to submit an Existing Capacity Qualification Package in addition to the New Capacity Show of Interest Form and New Capacity Qualification Package that it is required to submit pursuant to Section III.13.1.1.2. The bids contained in an Existing Capacity Qualification Package submitted pursuant to this Section III.13.1.2.5 must clearly indicate which New Generating Capacity Resource the Existing Capacity Qualification Package is associated with, and if accepted in accordance with Section III.13.1.2.3, would only be entered into the Forward Capacity Auction where: (i) the new resource is not accepted for participation in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.2; or (ii) no offer from that New Generating Capacity Resource clears in the Forward Capacity Auction, as described in Section III.13.2.3.2(e). An Existing Capacity Qualification Package submitted pursuant to this Section III.13.1.2.5 must conform in all other respects to the requirements of this Section III.13.1.2.

#### III.13.1.3. Import Capacity.

The qualification requirements for import capacity shall depend on whether the import capacity is an Existing Import Capacity Resource or a New Import Capacity Resource. Both Existing Import Capacity Resources and New Import Capacity Resources clearing in the Forward Capacity Auction shall have a Capacity Supply Obligation and shall receive payments only for the one-year Capacity Commitment Period associated with that Forward Capacity Auction. Both Existing Import Capacity Resources and New Import Capacity Resources clearing in the Forward Capacity Auction must be backed by one or more External Resources or by an external Control Area throughout the relevant Capacity Commitment Period. An external Demand Resource may not be an Existing Import Capacity Resource or a

New Import Capacity Resource. External nodes shall be mapped to Capacity Zones as shown in the following table:

| External Node Common Name       | Capacity Zone |
|---------------------------------|---------------|
| NB-NE External Node             | Maine         |
| HQ Phase I/II External Node     | Rest-of-Pool  |
| Highgate External Node          | Rest-of-Pool  |
| NY-NE AC External Node          | Rest-of-Pool  |
| Cross Sound Cable External Node | СТ            |

#### III.13.1.3.1. Definition of Existing Import Capacity Resource.

Capacity associated with a multi-year contract entered into before the Existing Capacity Qualification

Deadline to provide capacity in the New England Control Area from outside of the New England Control

Area for a period including the whole Capacity Commitment Period, or capacity from an External

Resource that is owned or directly controlled by the Lead Market Participant and which is committed for

at least two whole consecutive Capacity Commitment Periods by the Lead Market Participant in the New

Capacity Qualification Package, shall participate in the Forward Capacity Auction as an Existing Import

Capacity Resource, except that if that Existing Import Capacity Resource has not cleared in a previous

Forward Capacity Auction, then the import capacity shall participate in the Forward Capacity Auction as

a New Import Capacity Resource.

#### III.13.1.3.2. Qualified Capacity for Existing Import Capacity Resources.

The summer Qualified Capacity and winter Qualified Capacity of an Existing Import Capacity Resource shall be based on the data provided to the ISO during the qualification process, subject to ISO review and verification.

The qualified capacity for the Existing Import Capacity Resources associated with the VJO and NYPA contracts listed in Section III.13.1.3.3(c) as of the Capacity Commitment Period beginning June 1, 2014 shall be equal to the lesser of the stated amount in Section III.13.1.3.3(c) or the median amount of the energy delivered from the Existing Import Capacity Resource during the New England system coincident peak over the previous five Capacity Commitment Periods at the time of qualification.

#### III.13.1.3.3. Qualification Process for Existing Import Capacity Resources.

Existing Import Capacity Resources shall be subject to the same qualification process as Existing Generating Capacity Resources, as described in Section III.13.1.2.3, except as follows:

- (a) No later than 10 Business Days prior to the Existing Capacity Qualification Deadline, the Market Participant submitting each Existing Import Capacity Resource must also submit to the ISO: (i) documentation of a multi-year contract entered into before the Existing Capacity Qualification Deadline to provide capacity in the New England Control Area from outside the New England Control Area for a period including the whole Capacity Commitment Period, including documentation of the MW value of the contract; or (ii) proof of ownership or direct control over one or more External Resources that will be used to back the Existing Import Capacity Resource during the Capacity Commitment Period, together with information to establish the summer and winter ratings of the resource(s) backing the import. In either case, the Market Participant must specify the interface over which the capacity will be imported.
- (b) The rationing election described in Section III.13.1.2.3.1 shall not apply. An Existing Import Capacity Resource may not elect whether to be rationed. As described in Section III.13.2.6, Existing Import Capacity Resources are always subject to rationing, except where such rationing would violate any applicable physical minimum flow requirements on the associated interface.
- (c) The Existing Import Capacity Resources associated with contracts listed in the table below may qualify to receive the treatment described in Section III.13.2.7.3 for the duration of the contracts as listed. For each Forward Capacity Auction after the first Forward Capacity Auction, in order for an Existing Import Capacity Resource associated with a contract listed below to qualify for the treatment described in Section III.13.2.7.3, no later than 10 Business Days prior to the Existing Capacity Qualification Deadline, the Market Participant submitting the Existing Import Capacity Resource must also submit to the ISO documentation verifying that the contract will remain in effect throughout the Capacity Commitment Period and that it has not been amended. For the first Forward Capacity Auction, Existing Import

Capacity Resources associated with contracts listed in the table below are qualified to receive the treatment described in Section III.13.2.7.3.

| <b>Contract Description</b>    | MW        | <b>Contract End Date</b> |
|--------------------------------|-----------|--------------------------|
| NYPA: NY — NE: CMEEC           | 13.2      | 8/31/2025                |
| NYPA: NY — NE: MMWEC           | 53.3      | 8/31/2025                |
| NYPA: NY — NE: Pascoag         | 2.3       | 8/31/2025                |
| NYPA: NY— NE: VELCO            | 15.3      | 8/31/2025                |
|                                | 84.1      |                          |
| VJO: Highgate — NE             | Up to 225 | 10/31/2016               |
| VJO: Highgate — NE (extension) | Up to 6   | October 2020             |
| (beginning 11/01/2016)         |           |                          |
| VJO: Phase I/II — NE           | Up to 110 | 10/31/2016               |

#### III.13.1.3.4. Definition of New Import Capacity Resource.

Capacity not associated with a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside the New England Control Area for the whole Capacity Commitment Period, but that meets the requirements of Section III.13.1.3.5.1, shall participate in the Forward Capacity Auction as a New Import Capacity Resource. For capacity associated with a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside the New England Control Area for a period including the whole Capacity Commitment Period, or capacity from an External Resource that is owned or directly controlled by the Lead Market Participant and which is committed for at least two whole consecutive Capacity Commitment Periods by the Lead Market Participant in the New Capacity Qualification Package, if the import capacity has not cleared in a previous Forward Capacity Auction, then the import capacity shall participate in the Forward Capacity Auction as a New Import Capacity Resource.

#### III.13.1.3.5. Qualification Process for New Import Capacity Resources.

The qualification process for a New Import Capacity Resource, whether backed by a new External Resource, by one or more existing External Resources, or by an external Control Area, shall be the same as the qualification process for a New Generating Capacity Resource, as described in Section III.13.1.1.2, except as follows:

#### III.13.1.3.5.1. Documentation of Import.

For each New Import Capacity Resource, the Market Participant submitting the import capacity must also submit: (i) documentation of a one-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the entire Capacity Commitment Period, including documentation of the MW value of the contract; (ii) documentation of a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for a period including the entire Capacity Commitment Period if the import capacity has not cleared in a previous Forward Capacity Auction, including documentation of the MW value of the contract; (iii) proof of ownership or direct control over one or more External Resources that will be used to back the New Import Capacity Resource during the Capacity Commitment Period, including information to establish the summer and winter ratings of the resource(s) backing the import; or (iv) documentation for system-backed import capacity that the import capacity will be supported by the Control Area and that the energy associated with that system-backed import capacity will be afforded the same curtailment priority as that Control Area's native load. For each New Import Capacity Resource, the Market Participant must specify the interface over which the capacity will be imported. The Market Participant must indicate whether the import is associated with any investment in transmission that increases New England's import capability. If the import will be backed by a single new External Resource, the Market Participant submitting the import capacity must also submit a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21.1 or some other type).

#### III.13.1.3.5.2. Import Backed by Existing External Resources.

If the New Import Capacity Resource will be backed by one or more External Resources existing at the time of the Forward Capacity Auction, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Market Participant shall instead submit a description of how the Capacity Supply Obligation, if an offer from the New Import Capacity Resource clears in the Forward Capacity Auction, will be met.

The description must indicate specifically which External Resources will back the New Import Capacity Resource during the Capacity Commitment Period, and if those External Resources are not owned or controlled directly by the Market Participant, the description must include a commitment that the External Resources will have sufficient capacity that is not obligated outside the New England Control Area to

fully satisfy the New Import Capacity Resource's potential Capacity Supply Obligation during the Capacity Commitment Period and demonstrate how that commitment will be met.

#### III.13.1.3.5.3. Imports Backed by an External Control Area.

If the New Import Capacity Resource will be backed by an external Control Area, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Market Participant shall instead submit system load and capacity projections for the external Control Area showing sufficient excess capacity during the Capacity Commitment Period to back the New Import Capacity Resource.

#### III.13.1.3.5.3.1. Imports Crossing Intervening Control Areas.

The preceding rules define requirements associated with the import of capacity from a Control Area, or resources located in a Control Area, directly adjacent to the New England Control Area. Imports of capacity from a Control Area or resources located in a Control Area where such import crosses an intervening Control Area or Control Areas shall comply with the following additional requirements: (1) For imports crossing a single intervening Control Area, the Market Participant entering the import contract shall demonstrate, as detailed in the ISO New England Manuals, that the remote Control Area will afford the energy export to the adjacent intervening Control Area the same curtailment priority as its native load, that the adjacent intervening Control Area has procedures in place to explicitly recognize the linkage between the import and re-export of energy in support of the import contract, and that the energy export to the ISO will not be curtailed (except pro-rata with a curtailment of native load) so long as the linked import is flowing. (2) For imports crossing more than one intervening Control Area, in addition to the requirements above, the Market Participant entering the import contract shall demonstrate, as detailed in the ISO New England Manuals, by the New Capacity Qualification Deadline, that explicit market and operating procedures exist among the intervening Control Areas to ensure that the energy required to be delivered to the New England Control Area will be guaranteed the same curtailment priority as the intervening native loads, and that none of the intervening Control Areas will curtail the transaction except in conjunction with a curtailment of native load. (3) The Market Participant entering the import contract shall demonstrate that capacity it supplies to the New England Control Area will not be recalled or curtailed to satisfy the load of the external Control Area, or that the external Control Area in which it is located will afford New England Control Area load the same curtailment priority that it affords its own Control Area native load.

#### III.13.1.3.5.4. Capacity Commitment Period Election.

The provisions regarding Capacity Commitment Period election (Section III.13.1.1.2.2.4) shall not apply. A New Import Capacity Resource may not elect to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that clears in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears.

#### III.13.1.3.5.5. Initial Interconnection Analysis.

The provisions regarding initial interconnection analysis (Section III.13.1.1.2.3) shall not apply.

# III.13.1.3.5.6. Review by Internal Market Monitor of Offers from New Import Capacity Resources and Existing Import Capacity Resources.

In addition to the review described in Section III.13.1.1.2.2.3 and Section III.A.21, the Internal Market Monitor shall review each offer from Existing Import Capacity Resources and New Import Capacity Resources. An offer from an Existing Import Capacity Resource or a New Import Capacity Resource shall be rejected if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, and the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)).

### III.13.1.3.5.7. Qualification Determination Notification for New Import Capacity Resources.

For New Import Capacity Resources, the qualification determination notification described in Section III.13.1.1.2.8 shall be modified to reflect the differences in the qualification process described in this Section III.13.1.3.5.

#### III.13.1.3.5.8. Rationing Election.

The rationing election described in Section III.13.1.1.2.2.3(b) shall not apply. A New Import Capacity Resource may not elect whether to be rationed. As described in Section III.13.2.6, New Import Capacity Resources are always subject to rationing, except where such rationing would violate any applicable physical minimum flow requirements on the associated interface.

#### III.13.1.4. Demand Resources.

#### III.13.1.4.1. Demand Resources.

To participate in a Forward Capacity Auction as a Demand Resource, a resource must meet the requirements of this Section III.13.1.4.1. No resource shall be permitted to participate in a Forward Capacity Auction as a Demand Response Capacity Resource prior to the Forward Capacity Auction for the 2017-2018 Capacity Commitment Period. A Demand Response Capacity Resource with an early Commercial Operation Date shall be considered a Real-Time Demand Response Resource for any Capacity Commitment Period commencing prior to June 1, 2017. No resource shall be permitted to participate in a Forward Capacity Auction as a Real-Time Demand Response Resource beginning with the Forward Capacity Auction for the 2017-2018 Capacity Commitment Period. The amount of capacity offered by a Demand Resource shall be a minimum of 100 kW aggregated in a Dispatch Zone. A Demand Resource may continue to offer capacity into Forward Capacity Auctions and reconfiguration auctions for Capacity Commitment Periods in an amount less than or equal to its remaining Measure Life. Demand Resources must comply with all applicable federal, state, and local regulatory, siting, and tariff requirements, including interconnection tariff requirements related to siting, interconnection, and operation of the Demand Resource. Demand Resources are not permitted to submit import or export bids or Administrative Export De-list Bids.

A Demand Resource shall no longer be eligible to participate in the Forward Capacity Market if its Permanent De-list Bid is accepted. For purposes of this Section III.13.1.4, references to the Lead Market Participant for a resource shall include the Enrolling Participant for a Demand Resource.

#### III.13.1.4.1.1. Existing Demand Resources.

Demand Resources that previously have been in service and registered with the ISO, and which are not otherwise New Demand Resources, shall be Existing Demand Resources. Existing Demand Resources shall include and are limited to (i) Demand Resources that have been in service and registered with the ISO to fulfill a Capacity Supply Obligation created by clearing in a past Forward Capacity Auction, or (ii) Demand Resources participating in the Real-Time Demand Response Program (30-Minute and 2-Hour) and in the Real-Time Profiled Response Program, as defined in Appendix E of this Market Rule 1, before the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction. Except as specified in Section III.13.1.4.1, Existing Demand Resources shall be subject to the same qualification process as Existing Generating Capacity Resources, as described in Section III.13.1.2.3. Existing Demand Resources shall be subject to Section III.13.1.2.2.5.2. An Existing Demand Resource may submit a Non-Price Retirement Request pursuant to the provisions of Section III.13.1.2.3.1.5, provided, however, that Non-Price Retirement Requests shall not be used as a mechanism to inappropriately qualify assets associated with Existing Demand Resources as New Demand Resources. Existing Demand Resources

may de-list consistent with Sections III.13.1.2.3.1.1 and III.13.1.2.3.1.2. Existing Demand Response Capacity Resources shall be subject to Section III.13.7.1.1.5.

#### III.13.1.4.1.2. New Demand Resources.

A New Demand Resource is a Demand Resource that has not been in service prior to the applicable Existing Capacity Qualification Deadline of the Forward Capacity Auction, or Distributed Generation that has operated only to address an electric power outage due to failure of the electrical supply, on-site disaster, local equipment failure, or public service emergencies such as flood, fire, or natural disaster, or excessive deviations from standard voltage from the electrical supplier to the premises during the 12-month period prior to the applicable Existing Capacity Qualification Deadline of the Forward Capacity Auction, and is not an Existing Demand Resource. A Demand Resource that has previously been defined as an Existing Demand Resource shall be considered a New Demand Resource if it meets one of the conditions listed in Section III.13.1.1.1.2.

#### III.13.1.4.1.2.1. Qualified Capacity of New Demand Resources.

For Forward Capacity Auctions a New Demand Resource shall have a summer Qualified Capacity and winter Qualified Capacity based on the resource's Demand Reduction Values as submitted and reviewed pursuant to this Section III.13.1.4.

The documentation, analysis, studies and methodologies used to support the estimates described in this Section III.13.1.4.1.2.1 must be submitted as part of the Measurement and Verification Plan, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

#### III.13.1.4.1.2.2. Initial Analysis for Certain New Demand Resources

For each New Demand Resource that is a Demand Response Capacity Resource, Real-Time Demand Response Resource or a Real-Time Emergency Generation Resource, the ISO shall perform an analysis based on the information provided in the New Demand Resource Show of Interest Form to determine the amount of capacity that the resource could provide by the start of the associated Capacity Commitment Period. This analysis shall be performed consistent with the criteria and conditions described in ISO New England Planning Procedures. Where, as a result of this analysis, the ISO determines that because of overlapping interconnection impacts, such a New Demand Resource that is otherwise accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1 cannot deliver any of the capacity that it would otherwise be able to provide (in the

absence of the other relevant Existing Capacity Resources), then that New Demand Resource will not be accepted for participation in the Forward Capacity Auction.

#### III.13.1.4.1.3. Special Provisions for Real-Time Emergency Generation Resources.

All Real-Time Emergency Generation Resources shall be treated in the same manner as Existing Demand Resources in the Forward Capacity Auction as described in Section III.13.2. Real-Time Emergency Generation Resources may: (i) submit Static De-list Bids pursuant to Section III.13.1.2.3.1.1, (ii) submit Dynamic De-list Bids pursuant to Section III.13.2.3.2(d), or (iii) submit Permanent De-list Bids pursuant to Section III.13.1.2.3.1.2. Real-Time Emergency Generation Resources may not submit an Export Bid pursuant to Section III.13.1.2.3.1.3 or an Administrative Export De-list Bid pursuant to Section III.13.1.2.3.1.4. Real-Time Emergency Generation Resources may not import capacity pursuant to Section III.13.1.3. A Real-Time Emergency Generation Resource may not participate in a reconfiguration auction. Such resources may participate in a Capacity Supply Obligation Bilateral as either a Capacity Transferring Resource or a Capacity Acquiring Resource, provided, however, that where a Real-Time Emergency Generation Resource participates in a Capacity Supply Obligation Bilateral as a Capacity Acquiring Resource, the Capacity Transferring Resource must also be a Real-Time Emergency Generation Resource. Such resources may not be Supplemental Capacity Resources. Real-Time Emergency Generation Resources that are New Demand Resources as defined in Section III.13.1.4.1.2 shall be subject to the qualification and financial assurance requirements applicable to New Demand Resources.

#### III.13.1.4.2. Show of Interest Form for New Demand Resources.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Resource, the Project Sponsor must submit to the ISO a New Demand Resource Show of Interest Form as described in this Section III.13.1.4.2 during the New Capacity Show of Interest Submission Window, as described in Section III.13.1.10. The ISO may waive the submission of any information not required for evaluation of a project. The New Demand Resource Show of Interest Form is available on the ISO website.

(a) A completed New Demand Resource Show of Interest Form shall include, but is not limited to, the following information: project name; Load Zone within which the Demand Resource project will be located; the Dispatch Zone within which a Demand Response Capacity Resource, Real-Time Demand Response Resource, or Real-Time Emergency Generation Resource will be located; estimated summer and winter Demand Reduction Values (MW) per measure and/or per customer facility (measured at the

customer meter and not including losses) expected to be achieved five weeks prior to the first and second annual Forward Capacity Auctions after the Forward Capacity Auction in which the Demand Resource Project Sponsor's capacity award would be made, if applicable, and on the Commercial Operation date; estimated total summer and winter Demand Reduction Value of the Demand Resource project; supporting documentation (e.g., engineering estimates or documentation of verified savings from comparable projects) to substantiate the reasonableness of the estimated Demand Reduction Values; Demand Resource type (On-Peak Demand Resource, Seasonal Peak Demand Resource, Demand Response Capacity Resource, Real-Time Demand Response Resource or Real-Time Emergency Generation Resource); brief Demand Resource project description including measure type (i.e., Energy Efficiency, Load Management, and/or Distributed Generation); types of facilities at which the measures will be implemented; customer classes and end-uses served; expected Commercial Operation date -i.e., the date by which the Project Sponsor expects to reach Commercial Operation (Commercial Operation for a Demand Resource shall mean the demonstration to the ISO by the Project Sponsor that the Demand Resource described in the Project Sponsor's New Demand Resource Qualification Package has achieved its full Demand Reduction Value); ISO Market Participant status and ISO customer identification (if applicable); status under Schedules 22 or 23 of the Transmission, Markets and Services Tariff (if applicable); project/technical and credit/financial contacts; and for individual Distributed Generation projects and Demand Resource projects from a single facility with a Demand Reduction Value equal to or greater than 5 MW, the Pnode and service address at which the end-use facility is located; capability and experience of the Project Sponsor.

#### III.13.1.4.2.1. Qualification Package for Existing Demand Resources.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as an Existing Demand Resource, the Project Sponsor must submit an Existing Capacity Qualification Package no later than the Existing Capacity Qualification Deadline. The Existing Capacity Qualification Package for an Existing Demand Resource shall conform to the requirements of Section III.13.1.4.1. All Existing Demand Resources must provide a Measurement and Verification Plan which complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

#### III.13.1.4.2.2. Qualification Package for New Demand Resources.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Resource, the Project Sponsor must submit a New Demand Resource Qualification Package no later than the New Capacity Qualification Deadline. The New Demand Resource Qualification Package

shall conform to the requirements of this Section III.13.1.4.2.2. The ISO may waive the submission of any information not required for evaluation of a project.

#### III.13.1.4.2.2.1. [Reserved.]

#### III.13.1.4.2.2.2. Source of Funding.

The Project Sponsor must provide source of funding which includes, but is not limited to, the following information: The source(s) of public benefits funding or private financing, or a funding plan supplemented by information on how previous projects were funded; A completed ISO credit application.

#### III.13.1.4.2.2.3. Measurement and Verification Plan.

For all Demand Resources other than Demand Response Capacity Resources and Real-Time Emergency Generation Resources, the Project Sponsor must provide a Measurement and Verification Plan which complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3, Section III.8A and III.8B and the ISO New England Manuals.

#### III.13.1.4.2.2.4. Customer Acquisition Plan.

A Project Sponsor with more than a single customer must provide a description of its plan to acquire customers that includes, but is not limited to, the following information: a description of proposed customer market; the estimated size of target market and supporting documentation; a marketing plan with supporting documentation describing the manner in which customers will be recruited; and evidence supporting the viability of the marketing plan.

# III.13.1.4.2.2.4.1. Individual Distributed Generation Projects and Demand Resource Projects From a Single Facility With A Demand Reduction Value Greater Than or Equal to 5 MW.

For individual Distributed Generation projects and Demand Resource projects from a single facility with a Demand Reduction Value greater than or equal to 5 MW the critical path schedule requirements and the monitoring and milestones are the same as those required for New Generating Capacity Resources as set forth in Section III.13.1.1.2.2.2.

III.13.1.4.2.2.4.2. Demand Resource Projects Involving Multiple Facilities and Demand
Resource Projects From a Single Facility With A Demand Reduction Value
Less Than 5 MW.

A critical path schedule for Demand Resource projects installed at multiple facilities and Demand Resource projects from a single facility with a Demand Reduction Value of less than 5 MW shall be comprised of a delivery schedule of the share of total offered Demand Reduction Value achieved as of target dates which are: (i) The cumulative percentage of total Demand Reduction Value achieved on target date 1 occurring five weeks prior to the first annual Forward Capacity Auction after the Forward Capacity Auction in which the Demand Resource Project Sponsor's capacity award was made; (ii) The cumulative percentage of total Demand Reduction Value achieved on target date 2 occurring five weeks prior to the second annual Forward Capacity Auction after the Forward Capacity Auction in which the Demand Resource Project Sponsor's capacity award was made; and (iii) target date 3 which is the expected Commercial Operation date, which must be on or before the first day of the relevant Capacity Commitment Period and by which date 100% of total Demand Reduction Value must be complete

# III.13.1.4.2.2.4.3. Additional Requirement For Demand Resource Project Sponsor Proposing Total Demand Reduction Value of 30 Percent or Less by the Second Target Date.

If a Demand Resource Project Sponsor proposes in its New Demand Resource Qualification Package a cumulative Percent of Total Demand Reduction Value Complete that is 30 percent or less by the second critical path schedule target date, then a pipeline analysis must be submitted to the ISO five weeks prior to the second annual Forward Capacity Auction after the Forward Capacity Auction in which the award was made. A pipeline analysis demonstrates the Demand Resource Project Sponsor's ability to fulfill its obligation to deliver capacity that cleared in a Forward Capacity Auction by the relevant Capacity Commitment Period. Such an analysis must list the customers that have made a commitment to participate in the Demand Resource Project Sponsor's program to deliver capacity to meet the Demand Resource Project Sponsor's Forward Capacity Auction obligations, and must include each customer's projected summer and winter Demand Reduction Values, and expected measure installation date; provided, however, that a Demand Resource Project Sponsor targeting customer facilities with under 10 kW of Demand Reduction Value per facility shall have the option of using a targeting and marketing plan based on past performance in that market to determine the Project Sponsor's ability to fulfill its obligation by the relevant Capacity Commitment Period. To the extent that the Demand Resource Project Sponsor is unable to demonstrate through its pipeline analysis that it has sufficient customers to meet its Capacity Supply Obligation by the beginning of the relevant Capacity Commitment Period, the Demand Resource Project Sponsor shall be subject to the ISO's critical path schedule monitoring procedures, as specified in Section III.13.3 of Market Rule 1.

#### III.13.1.4.2.2.5. Capacity Commitment Period Election.

In the New Demand Resource Qualification Package, the Project Sponsor must specify whether, if its New Demand Resource offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. If no such election is made in the New Demand Resource Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Demand Resource offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Demand Resource offer clears. If the Project Sponsor elects to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, then the Project Sponsor may not change the Demand Resource type as long as that Capacity Supply Obligation and Capacity Clearing Price continue to apply. If an offer from a New Demand Resource clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.4.2.2.5.

#### III.13.1.4.2.2.6. Rationing Election.

The Project Sponsor for a New Demand Resource must indicate in the New Demand Resource Qualification Package if an offer from the New Demand Resource may be rationed. A Project Sponsor may specify a single MW quantity to which offers may be rationed. Without such indication, offers will only be accepted or rejected in whole. This rationing election shall apply for the entire Forward Capacity Auction.

### III.13.1.4.2.3. Consistency of the New Demand Resource Qualification Package and New Demand Resource Show of Interest Form.

The ISO shall review the Project Sponsor's New Demand Resource Qualification Package for consistency with its New Demand Resource Show of Interest Form. The New Demand Resource Qualification Package may not contain material changes relative to the New Demand Resource Show of Interest Form. A material change may include, but is not limited to the following: (i) a change in the designation of the Demand Resource type; (ii) a change in the Project Sponsor, subject to review by the ISO of the capability and experience of the new Project Sponsor; (iii) a change in the Load Zone within which the

project is located, and a change in the Dispatch Zone within which the Demand Response Capacity Resource, Real-Time Demand Response Resource or Real-Time Emergency Generation Resource is located; (iv) a change in the total summer or winter Demand Reduction Value of the project by more than 30 percent; (v) a change in the general type of measure being implemented (e.g., Energy Efficiency, Load Management, Distributed Generation); (vi) a change in the treatment as an Existing Demand Resource for the first Forward Capacity Auction; or (viii) a misrepresentation of the interconnection status of a Distributed Generation project.

#### III.13.1.4.2.4. Offers From New Demand Resources.

All New Demand Resources that might submit offers in the Forward Capacity Auction at prices below the relevant Offer Review Trigger Price must include in the New Demand Resource Qualification Package the lowest price at which the resource requests to offer capacity in the Forward Capacity Auction and supporting documentation justifying that price as competitive in light of the resource's costs (as described in Section III.A.21). This price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that section.

#### III.13.1.4.2.5. Notification of Qualification for Demand Resources.

#### III.13.1.4.2.5.1. Evaluation of Demand Resource Qualification Materials.

The ISO shall review the information submitted by Existing Demand Resources and New Demand Resources and shall determine whether the information submitted complies with the requirements set forth in this Section III.13.1.4 and whether, based on the information provided, the Demand Resource is accepted for participation in the Forward Capacity Auction. In making these determinations, the ISO may consider, but is not limited to consideration of, the following:

- (a) whether the information submitted by Existing Demand Resources and New Demand Resources is accurate and contains all of the elements required by this Section III.13.1.4;
- (b) whether the critical path schedule submitted by New Demand Resources includes all necessary elements and is sufficiently developed;
- (c) whether the milestones in the critical path schedule submitted by New Demand Resources are reasonable and likely to be met;

- (d) whether, in the case of a resource previously counted as a capacity resource, the requirements for treatment as a New Demand Resource are satisfied; and
- (e) whether the Measurement and Verification Plan complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

#### **III.13.1.4.2.5.2.** Notification of Qualification for Existing Demand Resources.

For each Existing Demand Resource, the ISO will notify the Resource's Lead Market Participant no later than 15 Business Days before the Existing Capacity Qualification Deadline of: (i) Demand Resource type; and (ii) summer and winter Demand Reduction Values and estimates of summer and winter Qualified Capacity as defined in Section III.13.1.4.3 and the Load Zone in which the Capacity Resource is located, and the Dispatch Zone within which a Demand Response Capacity Resource, Real-Time Demand Response Resource, or Real-Time Emergency Generation Resource is located. If the Lead Market Participant believes that an ISO-determined summer Qualified Capacity or winter Qualified Capacity for an Existing Demand Resource does not accurately reflect the determination described in Section III.13.1.4.3, then the Lead Market Participant must notify the ISO within 5 Business Days of receipt of the Qualified Capacity notification. If an Existing Demand Resource is not submitting a change in its Demand Resource type, a Permanent De-List Bid or Static De-List Bid for the Forward Capacity Auction, then no further submissions or actions for that resource are necessary, and the resource shall participate in the Forward Capacity Auction as described in Section III.13.2.3.2(c) with Qualified Capacity as indicated in the ISO's notification, and may not elect to have the Capacity Supply Obligation and Capacity Clearing Price apply after the Capacity Commitment Period associated with the Forward Capacity Auction. If a Market Participant believes that the Demand Reduction Value or Qualified Capacity for an Existing Demand Resource is inaccurate or wishes to change its Demand Resource type, the Market Participant must notify the ISO within 5 Business Days of receipt of the Qualified Capacity notification and submit an Updated Measurement and Verification Plan to reflect the change in its Demand Resource type, if applicable. Updated Measurement and Verification Plans must be received by the ISO no later than 5 Business Days after receipt of the Qualified Capacity notification. Designation of the Demand Resource type may not be changed during the Capacity Commitment Period.

#### III.13.1.4.2.5.3. Notification of Qualification for New Demand Resources.

No later than 127 days prior to the relevant Forward Capacity Auction, the ISO shall send notification to Project Sponsors for each New Demand Resource indicating whether the New Demand Resource has been accepted for participation in the Forward Capacity Auction.

#### III.13.1.4.2.5.3.1. Notification of Acceptance to Qualify of a New Demand Resource.

For a New Demand Resource accepted for participation in the Forward Capacity Auction, the notification will specify the Demand Resource's summer and winter Demand Reduction Value and summer and winter Qualified Capacity. Designation of the Demand Resource type may not be changed during the Capacity Commitment Period.

#### III.13.1.4.2.5.3.2. Notification of Failure to Qualify of a New Demand Resource.

For a New Demand Resource not accepted for participation in the Forward Capacity Auction, the notification will provide an explanation as to why the resource did not meet the requirements set forth in this Section III.13.1.4 and was not accepted.

#### III.13.1.4.3. Measurement and Verification Applicable to All Demand Resources.

To demonstrate the Demand Reduction Value of a Demand Resource project, as defined in Section III.13.1.4.1, all Demand Resources participating in the Forward Capacity Auction, Capacity Supply Obligation Bilaterals or reconfiguration auctions shall submit to the ISO the Demand Resource project Measurement and Verification Documents in accordance with this Section III.13.1.4.3, Sections III.8A and III.8B and the ISO New England Manuals. Demand Response Capacity Resources and Real-Time Emergency Generation Resources participating in the Forward Capacity Auction, Capacity Supply Obligation Bilaterals or reconfiguration auctions must estimate Demand Reduction Values pursuant to the requirements of Sections III.8A, Section III.8B, Section III.13.6.1.5.4, and Section III.E1 and Section III.E2. To the extent that a Demand Response Capacity Resource consists, in whole or in part, of assets capable of delivering Net Supply, the estimated Demand Reduction Value of a Demand Response Capacity Resource may include an estimate of Net Supply. A Net Supply Generator Asset or other Generator Asset located at the same Retail Delivery Point as a Demand Response Asset that is associated with a Demand Response Capacity Resource may not participate in the Forward Capacity Market as a Generating Capacity Resource, provided that this exclusion shall not apply to a Generator Asset if it is separately metered and its output is added to the metered load as measured at the Retail Delivery Point. The ISO shall review such Measurement and Verification Documents to determine whether they are consistent with the measurement and verification requirements set forth in this Section III.13.1.4.3, Section III.8A, Section III.8B, and the ISO New England Manuals.

### III.13.1.4.3.1. Measurement and Verification Documents Applicable to On-Peak Demand Resources, and Seasonal Peak Demand Resources.

Measurement and Verification Documents for On-Peak Demand Resources, and Seasonal Peak Demand Resources must demonstrate both availability and performance of Demand Resource projects in reducing demand coincident with Demand Resource On-Peak Hours, or Demand Resource Seasonal Peak Hours such that the reported monthly Demand Reduction Value shall achieve at least a ten percent relative precision and an eighty percent confidence interval as described and applied in the ISO New England Manual on Measurement and Verification of Demand Reduction Value from Demand Resources. The Measurement and Verification Documents shall serve as the basis for the claimed Demand Reduction Value of a Demand Resource project. The Measurement and Verification Documents shall document the measurement and verification performed to verify the achieved Demand Reduction Value of the Demand Resource project. The Measurement and Verification Documents shall contain a projection of the Demand Resource project's Demand Reduction Value for each month of the Capacity Commitment Period and over the expected Measure Life of the Demand Resource project. A Demand Resource's Measurement and Verification Documents must describe the methodology used to calculate electrical energy load reduction or output during Demand Resource On-Peak Hours, or Demand Resource Seasonal Peak Hours. The Measurement and Verification Documents shall include a Measurement and Verification Plan submitted in the Forward Capacity Auction Qualification, as described in Section III.13.1.4.3 and a monthly Measurement and Verification Summary Report during the Capacity Commitment Period. The monthly Measurement and Verification Summary Reports shall reference the measurement and verification protocols and performance data documented in the Measurement and Verification Plan or the Measurement and Verification Reference Report(s). Such monthly Measurement and Verification Summary Reports will document the Demand Resource Project Sponsor's total Demand Reduction Value from eligible pre-existing measures and new measures, and the Project Sponsor's total Demand Reduction Value from both eligible pre-existing measures and new measures, for all measures it had in operation as of the end of the previous month. The monthly Measurement and Verification Summary Reports shall be based on Measurement and Verification Documents determined in accordance with Market Rule 1 and the ISO New England Manuals, and shall be the basis for monthly settlement with Demand Resource Project Sponsors. All Measurement and Verification Documents shall conform to the ISO's specifications with respect to content, format and delivery methodology, and shall be submitted in accordance with the timelines and deadlines set forth in Market Rule 1 and the ISO New England Manuals.

#### III.13.1.4.3.1.1. Optional Measurement and Verification Reference Reports.

At the option of the Demand Resource Project Sponsor, the Measurement and Verification Documents may also include one or more Measurement and Verification Reference Report(s) submitted 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 shall update the prospective Demand Reduction Value of the Demand Resource project based on measurement and verification studies performed during the Capacity Commitment Period.

#### III.13.1.4.3.1.2. Updated Measurement and Verification Documents.

At the option of the Demand Resource Project Sponsor, an Updated Measurement and Verification Plan may be submitted during a subsequent Forward Capacity Auction qualification process prior to the beginning of the Capacity Commitment Period of the Demand Resource project. The Updated Measurement and Verification Plan may include updated Demand Resource project specifications, measurement and verification protocols, and performance data. However, the Updated Measurement and Verification Plan shall not modify for the duration of the Capacity Commitment Period the total Demand Reduction Value and the Demand Resource type from the applicable Forward Capacity Auction in which the Demand Resource Project Sponsor's offer cleared. Additionally, the Updated Measurement and Verification Plan shall provide measurement and verification consistent with the requirements specified in the ISO New England Manuals, and shall be comparable to the quality of the original Measurement and Verification Plan accepted during the Forward Capacity Auction qualification process in which the Demand Resource project cleared the Forward Capacity Auction.

### III.13.1.4.3.1.3. Annual Certification of Accuracy of Measurement and Verification Documents.

Demand Resource Project Sponsors for On-Peak Demand Resources, or Seasonal Peak Demand Resources and Real-Time Demand Response Resources shall submit no less frequently than once per year, a statement certifying that the Demand Resource projects for which the Project Sponsor is requesting compensation continue to perform in accordance with the submitted Measurement and Verification Documents reviewed by the ISO. One such statement must be received by the ISO no later than 10 Business Days before the Existing Capacity Qualification Deadline.

#### III.13.1.4.3.1.4. Record Requirement of Retail Customers Served.

For Demand Resource projects targeting customer facilities with greater than or equal to 10 kW of Demand Reduction Value per facility, Demand Resource Project Sponsors shall maintain records of retail customers served including, at a minimum, the retail customer's address, the customer's utility distribution company, utility distribution company account identifier, measures installed, and

corresponding monthly Demand Reduction Values. For Demand Resource projects targeting customer facilities with under 10 kW of Demand Reduction Value per facility, the Demand Resource Project Sponsor shall maintain records as described above for customer facilities with greater than or equal to 10 kW of Demand Reduction Value per facility, or shall maintain records of aggregated Demand Reduction Value and measures installed by Load Zone and meter domain. Demand Resource Project Sponsors shall maintain such records until the end of the Measure Life, or until the Demand Resource is permanently delisted from the Forward Capacity Market, and shall submit such records to the ISO upon request in a readable electronic format.

### III.13.1.4.3.2. Measurement and Verification Documentation of Demand Reduction Values Applicable to All Demand Resources.

The Demand Resource Project Sponsor shall designate the specific methodology used to establish Demand Reduction Values, including the specification of Demand Resource On-Peak Hours for On-Peak Demand Resources, Demand Resource Seasonal Peak Hours for Seasonal Peak Demand Resources, or Real-Time Demand Response Event Hours for Real-Time Demand Response Resources, in its Measurement and Verification Plan pursuant to Section III.13.1.4.3. For Demand Response Capacity Resources and Real-Time Emergency Generation Resources, the Demand Resource Project Sponsor shall provide an estimate of Demand Reduction Values consistent with the baseline calculation methodology in Section III.8A and Section III.8B. To the extent that a Demand Response Capacity Resource consists, in whole or in part, of assets capable of delivering Net Supply, the estimated Demand Reduction Value of a Demand Response Capacity Resource may include an estimate of Net Supply. Distributed Generation, Demand Response Capacity Resource, Real-Time Demand Response, and Real-Time Emergency Generation Resource projects must include individual metering or a metering protocol consistent with the measurement and verification requirements set forth in Market Rule 1 and the ISO New England Manuals to monitor and verify the Demand Reduction Values of the Demand Resource project.

For Capacity Commitment Periods commencing on or after June 1, 2017, all Demand Response Assets must be metered at the Retail Delivery Point.

For Capacity Commitment Periods commencing on or after June 1, 2017, if the Real-Time Emergency Generation Asset cannot operate synchronized to the grid, and there is no Demand Response Asset at the same facility, the Real-Time Emergency Generation Asset can be metered at the Retail Delivery Point or at the Real-Time Emergency Generation Asset. If the Real-Time Emergency Generation Asset is capable of operating synchronized to the grid or there is a Demand Response Asset at the same facility then both

the Retail Delivery Point and the Real-Time Emergency Generation Asset must be metered. For Capacity Commitment Periods commencing on or after June 1, 2017, Market Participants with Real-Time Emergency Generation Assets must utilize a remote terminal unit for communicating telemetry and receiving Dispatch Instructions, and the metering equipment used to measure the performance of a Real-Time Emergency Generation Asset must meet the requirements of Section E2.2.1(a), (b), and (c), must be tested pursuant to Section E2.2.3, and are subject to auditing pursuant to Section E2.2.4.

For Capacity Commitment Periods commencing on or after June 1, 2017, if a Real-Time Emergency Generation Asset is metered at the generator, the associated Real-Time Emergency Generation Resource's Demand Reduction Value shall be calculated based upon the Average Hourly Output. If a Real-Time Emergency Generation Asset is only metered at the Retail Delivery Point, the associated Real-Time Emergency Generation Resource's Demand Reduction Value shall be calculated based upon the Average Hourly Load Reduction.

#### III.13.1.4.3.2.1. No Performance Data to Determine Demand Reduction Values.

Should a new Demand Resource, other than a Demand Response Capacity Resource, enter service at a time such that there is no performance data for June, July, August, December or January upon which to establish summer or winter seasonal Demand Reduction Values, and the Demand Resource has relieved itself of its Capacity Supply Obligation for those months through a Capacity Supply Obligation Bilateral or reconfiguration auction, then the summer or winter seasonal Demand Reduction Values will be the simple average of its Demand Reduction Values for those months with a Capacity Supply Obligation. For a new Demand Resource, other than a Demand Response Capacity Resource, that enters service outside of the summer DR Auditing Period or winter DR Auditing Period and the Demand Resource has relieved itself of its Capacity Supply Obligation for those months through a Capacity Supply Obligation Bilateral or reconfiguration auction, the Demand Resource Commercial Operation Audit results shall be used in the determination of the summer or winter seasonal Demand Reduction Value.

#### III.13.1.4.3.3. ISO Review of Measurement and Verification Documents.

The ISO shall review the Measurement and Verification Documents and complete such review and identify any necessary modifications in accordance with the Forward Capacity Auction qualification process as described in Section III.13.1 and pursuant to the ISO New England Manuals. In its review of the Measurement and Verification Documents, the ISO may consult with the Project Sponsor to seek clarification, to gather additional necessary information, or to address questions or concerns arising from the materials submitted. At the discretion of the ISO, the ISO may consider revisions or additions to the

Measurement and Verification Documents resulting from such consultation; provided, however, that in no case shall the ISO consider revisions or additions to the Measurement and Verification Documents if the ISO believes that such consideration cannot be properly accomplished within the time periods established for the qualification process.

#### III.13.1.4.3.4. Measurement and Verification Costs.

Costs associated with measurement and verification of the Demand Resource project shall be borne by the Demand Resource Project Sponsor. Demand Resource Project Sponsors submitting application materials and Measurement and Verification Documents for review during the Forward Capacity Auction qualification process shall be subject to the Qualification Process Cost Reimbursement Deposit, as described in Section III.13.1.9.3.

#### III.13.1.4.4. Dispatch of Active Demand Resources During Event Hours.

#### III.13.1.4.4.1. Notification of Demand Resource Forecast Peak Hours.

The ISO shall issue notice to Market Participants concerning Demand Resource Forecast Peak Hours on the day before the relevant Operating Day. The notice issued pursuant to this section is for informational purposes only and shall not constitute a Dispatch Instruction.

### III.13.1.4.4.2. Dispatch of Demand Resources During Real-Time Demand Resource Dispatch Hours.

The ISO shall issue Dispatch Instructions to Market Participants with Real-Time Demand Response Resources to curtail and restore loads during Real-Time Demand Resource Dispatch Hours. Dispatch Instructions shall apply to Real-Time Demand Response Resources. The amount of Demand Resources dispatched for each Real-Time Demand Resource Dispatch Hour will be the amount that the ISO determines is necessary to meet the reserve deficiency. The ISO may issue Dispatch Instructions that reduce or increase the amount dispatched in each hour.

### III.13.1.4.4.3. Dispatch of Demand Resources During Real-Time Emergency Generation Event Hours.

The ISO shall issue Dispatch Instructions to Market Participants with Real-Time Emergency Generation Resources to curtail and restore loads during Real-Time Emergency Generation Event Hours. Dispatch Instructions shall apply to specific Real-Time Emergency Generation Resources. The amount of Real-

Time Emergency Generation Resources dispatched for each Real-Time Emergency Generation Event Hour will be the amount the ISO determines is necessary to meet the reserve deficiency.

#### III.13.1.4.5. Selection of Active Demand Resources For Dispatch.

# III.13.1.4.5.1. Management of Real-Time Demand Response Assets and Real-Time Demand Response Resources.

A Market Participant must manage its Real-Time Demand Response Assets that are registered as a component of a Real-Time Demand Response Resource as of the first of a month so that the Real-Time Demand Response Resource complies with Dispatch Instructions. If the operation or potential operation of Real-Time Demand Response Assets cause, or potentially cause, a reliability problem, the ISO may direct Market Participants to not dispatch such assets or to restore the loads of such assets that have already been dispatched. If the ISO directs a Market Participant to not dispatch a Real-Time Demand Response Asset or to restore the load of a dispatched Real-Time Demand Response Asset, an adjustment to the dispatch and/or settlement process will be made to reflect the exclusion of that asset from dispatch or the restoration of that asset. Market Participants with Real-Time Demand Response Assets shall report to the ISO the load reduction and consumption, or generator output of each asset. Market Participants with Real-Time Demand Response Resources consisting of an aggregation of more than one Real-Time Demand Response Asset shall report the load reduction and consumption, or generator output of the resource, to the ISO as the sum of the load reduction, consumption, or generator output of the individual assets making up that resource. Real-Time Demand Response Resources shall be assigned a unique resource identification number. The load reduction and consumption, or generator output of a Real-Time Demand Response Resource is reported to the ISO as a single set of values. A Real-Time Demand Response Resource shall consist of one or more Real-Time Demand Response Assets that are located within the same Dispatch Zone.

# III.13.1.4.5.2. Management of Real-Time Emergency Generation Assets and Real-Time Emergency Generation Resources.

A Market Participant must manage its Real-Time Emergency Generation Assets that are registered as a component of a Real-Time Emergency Generation Resource as of the first of a month so that the Real-Time Emergency Generation Resource complies with Dispatch Instructions. If the operation or potential operation of Real-Time Emergency Generation Assets causes, or potentially causes, a reliability problem, the ISO may direct Market Participants to not dispatch such assets or to discontinue the output of such assets that have already been dispatched. If the ISO directs a Market Participant to not dispatch a Real-

Time Emergency Generation Asset or to discontinue the output of a dispatched Real-Time Emergency Generation Asset, an adjustment to the dispatch and/or settlement process will be made to reflect the exclusion of that asset from dispatch or the discontinued output of that asset. Market Participants with Real-Time Emergency Generation Assets shall report to the ISO the load reduction and consumption, or generator output of each asset. Market Participants with Real-Time Emergency Generation Resources consisting of an aggregation of more than one Real-Time Emergency Generation Asset shall report the generator output of the resource to the ISO as the sum of the generator outputs of the individual assets making up that resource. Real-Time Emergency Generation Resources shall be assigned a unique resource identification number. The generator output of a Real-Time Emergency Generation Resource is reported to the ISO as a single set of values. A Real-Time Emergency Generation Resource shall consist of one or more Real-Time Emergency Generation Assets that are located within the same Dispatch Zone.

#### III.13.1.4.5.3. [Reserved.]

III.13.1.4.6. Conversion of Active Demand Resources Defined at the Load Zone to Active Demand Resources Defined at Dispatch Zones.

#### III.13.1.4.6.1. Establishment of Dispatch Zones.

The ISO shall establish Dispatch Zones that reflect potential transmission constraints within a Load Zone that are expected to exist during each Capacity Commitment Period. Dispatch Zones shall be used to establish the geographic location and dispatch of Demand Response Capacity Resources, Real-Time Demand Response Resources and Real-Time Emergency Generation Resources. Dispatch Zones shall not change during a Capacity Commitment Period. For each Capacity Commitment Period, the ISO shall establish and publish Dispatch Zones by the beginning of the New Capacity Show of Interest Submission Window of the applicable Forward Capacity Auction. The ISO will review proposed Dispatch Zones with Market Participants prior to establishing and publishing final Dispatch Zones.

III.13.1.4.6.2. Disaggregation of Real-Time Demand Response Resources and Real-Time Emergency Generation Resources From Load Zones to Dispatch Zones.

#### III.13.1.4.6.2.1. Real-Time Demand Response Resource Disaggregation.

Market Participants with a Capacity Supply Obligation that is being fulfilled using a Real-Time Demand Response Resource in a Load Zone shall, prior to the start of the relevant Capacity Commitment Period, disaggregate that Real-Time Demand Response Resource into one or more Real-Time Demand Response

Resources located within one or more Dispatch Zones within the original Load Zone. The sum of the Capacity Values of the disaggregated Real-Time Demand Response Resources located within one or more Dispatch Zones within the Load Zone must be equal to the initial Capacity Supply Obligation within the original Load Zone. If the sum of the Capacity Values of the disaggregated Real-Time Demand Response Resources located within one or more Dispatch Zones within a Load Zone is less than the initial Capacity Supply Obligation by the start of the relevant Capacity Commitment Period, and the Market Participant does not transfer the entire difference through a Capacity Supply Obligation Bilateral or an annual reconfiguration auction by the beginning of the relevant Capacity Commitment Period, then the Market Participant will be deemed to have failed to meet its Capacity Supply Obligation, in which case the ISO shall terminate the Market Participant's Capacity Supply Obligation associated with the resource in the amount of the difference (which shall then be entered into subsequent reconfiguration auctions), terminate the Market Participant's right to any payments associated with the terminated Capacity Supply Obligation, and retain any applicable financial assurance associated with the terminated Capacity Supply Obligation.

#### III.13.1.4.6.2.2. Real-Time Emergency Generation Resource Disaggregation.

Market Participants with a Capacity Supply Obligation that is being fulfilled using a Real-Time Emergency Generation Resource in a Load Zone shall, prior to the start of the relevant Capacity Commitment Period, disaggregate that Real-Time Emergency Generation Resource into one or more Real-Time Emergency Generation Resources located within one or more Dispatch Zones within the original Load Zone. The sum of the Capacity Values of the disaggregated Real-Time Emergency Generation Resources located within one or more Dispatch Zones within the Load Zone must be equal to the initial Capacity Supply Obligation within the original Load Zone. If the sum of the Capacity Values of the disaggregated Real-Time Emergency Generation Resources located within one or more Dispatch Zones within a Load Zone is less than the initial Capacity Supply Obligation by the start of the relevant Capacity Commitment Period, and the Market Participant does not transfer the entire difference through a Capacity Supply Obligation Bilateral or an annual reconfiguration auction by the beginning of the relevant Capacity Commitment Period, then the Market Participant will be deemed to have failed to meet its Capacity Supply Obligation in which case the ISO shall terminate the Market Participant's Capacity Supply Obligation associated with the resource in the amount of the difference (which shall then be entered into subsequent reconfiguration auctions), terminate the Market Participant's right to any payments associated with the terminated Capacity Supply Obligation, and retain any applicable financial assurance associated with the terminated Capacity Supply Obligation.

III.13.1.4.7. [Reserved.]

III.13.1.4.8. [Reserved.]

III.13.1.4.9. Restrictions on Real-Time Demand Response Asset, Real-Time Emergency
Generation Asset, On-Peak Demand Resource and Seasonal Peak Demand
Resource Registration.

A Market Participant may not register and, if previously registered, must retire in accordance with Section III.13.1.4.9.1, a Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or asset associated with an On-Peak Demand Resource or Seasonal Peak Demand Resource that is comprised of:

- (a) the customers of Host Utilities that distributed more than 4 million MWh in the previous fiscal year if the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into the ISO-administered markets or programs, or
- (b) the customers of Host Utilities that distributed 4 million MWh or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers' demand response to be bid into the ISO-administered markets or programs.
- III.13.1.4.9.1. Requirement for Real-Time Demand Response Asset, Real-Time Emergency Generation Asset, On-Peak Demand Resource and Seasonal Peak Demand Resource Retirement.

A Market Participant must retire a previously registered Real-Time Demand Response Asset, Real-Time Emergency Generation Asset or asset associated with an On-Peak Demand Resource or Seasonal Peak Demand Resource that is comprised of customers specified in subsections (a) or (b) of Section III.13.1.4.9 no later than 12 months from the date that the ISO receives notice that the relevant electric retail regulatory authority prohibits such customer's demand response to be bid into the ISO-administered markets or programs or May 31, 2013, whichever is later.

# III.13.1.4.10. Providing Information On Demand Response Capacity, Real-Time Demand Response and Real-Time Emergency Generation Resources.

If requested by a Market Participant with a registered Load Asset, the ISO will provide the following information about end-use customers served by the Market Participant: (a) whether the end-use customer's facility is registered with the ISO as part of an asset and whether the asset is associated with a

Demand Response Resource, Real-Time Demand Response Resource or Real-Time Emergency Generation Resource, and; (b) the load reduction capability of the asset, as specified in the ISO's asset registration system, to which the end-use customer's facility is registered.

## III.13.1.4.11. Assignment of Demand Assets to a Demand Resource.

The following mapping provisions apply to Demand Resources other than Demand Response Capacity Resources, the mapping for which is addressed in Appendix E to Market Rule 1.

- (a) When a demand asset can be mapped to more than one Demand Resource, any demand assets shall be mapped to a commercial Demand Resource whose demand reduction capability is less than the lower of (i) its commercial capacity, as reflected in the resource's highest audit value or (ii) its highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period, before being mapped to a non-commercial Demand Resource or non-commercial increment of a Demand Resource.
- (b) A demand asset cannot be unmapped from a Demand Resource if, following the unmapping, the sum of the audit values of the remaining demand assets that are mapped to the Demand Resource would be lower than the resource's highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period.

## III.13.1.5. Offers Composed of Separate Resources.

Separate resources seeking to participate together in a Forward Capacity Auction shall submit a composite offer form no later than 10 Business Days after the date on which the ISO provides qualification determination notifications, as described in Section III.13.1.1.2.8, Section III.13.1.2.4, and Section III.13.1.2.4.5.3. Offers composed of separate resources may not be modified or withdrawn after the deadline for submission of the composite offer form. Separate resources may together participate in a Forward Capacity Auction as a single resource if the following conditions are met:

(a) In all months of the summer period (June through September where the summer resource is not a Demand Resource, April through November where the summer resource is a Demand Resource) of the Capacity Commitment Period, only one resource may be used to supply the amount of capacity offered during the entire summer period. In all months of the winter period (October through May where the summer resource is not a Demand Resource, December through March where the summer resource is a

Demand Resource) of the Capacity Commitment Period, multiple resources may be combined to supply the amount of capacity offered, provided that: (i) the resources together meet the amount of the offer in all months of the winter period; and (ii) to combine for a month, that month must be considered a winter month for both the summer resource and the resource combining with that summer resource in that month.

- (b) Each resource that is part of an offer composed of separate resources must qualify in accordance with all of the provisions of this Section III.13.1.5 applicable to that resource type. An offer composed of separate resources participates in the Forward Capacity Auction in accordance with the resource type of the resource providing capacity in the summer period. A resource electing (pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.2.2.5) to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its New Capacity Offer clears shall not be eligible to participate in an offer composed of separate resources as the resource providing capacity in the summer period in the Forward Capacity Auction in which the resource is a New Generating Capacity Resource or New Demand Resource.
- (c) The summer Qualified Capacity of an offer composed of separate resources shall be the summer Qualified Capacity of the single resource that will provide the Capacity Supply Obligation during the summer period. If the summer Qualified Capacity of an offer composed of separate resources is greater than the winter capacity for any month, then the provisions of Section III.13.1.2.2.5.2 shall apply, even where any of the resources comprising the offer composed of separate resources is an Intermittent Power Resource or Intermittent Settlement Only Resource. If the winter capacity of the offer composed of separate resources in any month is higher than the summer Qualified Capacity, then the capacity offered from the winter resources will be reduced pro-rata to equal the summer Qualified Capacity.
- (d) If an offer is composed of separate resources, and is intended to meet the Local Sourcing Requirement in an import-constrained Capacity Zone, then each resource comprising the offer must be located in that import-constrained Capacity Zone.
- (e) If an offer is composed of separate resources, and is intended to meet the capacity requirement in the Rest-of-Pool Capacity Zone, then each resource comprising the offer must be located in a Capacity Zone that is not export-constrained.

- (f) If an offer is composed of separate resources, and is for capacity in an export-constrained Capacity Zone, then each resource comprising the offer must be located inside of the export-constrained Capacity Zone or be located in any non-export constrained Capacity Zone.
- (g) A Real-Time Emergency Generation Resource may only participate in an offer composed of separate resources as a winter resource if the summer resource is also a Real-Time Emergency Generation Resource.

# III.13.1.5.A. Notification of FCA Qualified Capacity.

No later than 5 Business Days after the deadline for submission of offers composed of separate resources, the ISO shall notify the Project Sponsor or Lead Market Participant for each New Generating Capacity Resource, New Import Capacity Resource, and New Demand Resource of the resource's final FCA Qualified Capacity for the Forward Capacity Auction. Such notification will detail the resource's financial assurance requirements in accordance with Section III.13.1.9.

# III.13.1.6. Self-Supplied FCA Resources.

Where a Project Sponsor elects to designate all or a portion of a New Generating Capacity Resource or an Existing Generating Capacity Resource as a Self-Supplied FCA Resource, the Project Sponsor must make such designation in writing to the ISO no later than the date by which the Project Sponsor is required to submit the financial assurance deposit and, if the Project Sponsor is not also the associated load serving entity, the Project Sponsor must at that time provide written confirmation from the load serving entity regarding the Self-Supplied FCA Resource designation. A New Import Capacity Resource or Existing Import Capacity Resource may be designated as a Self-Supplied FCA Resource. All Self-Supplied FCA Resources shall be subject to the eligibility and locational requirements in this Section III.13.1.6. If designated as a Self-Supplied FCA Resource and otherwise accepted in the qualification process, the resource will clear in the Forward Capacity Auction as described in Section III.13.2.3.2(c) and, with the exception of demand programs for Self-Supplied FCA Resources, shall offset an equal amount of the load serving entity's share of Installed Capacity Requirement in the Capacity Commitment Period. A load serving entity seeking to self-supply using a Demand Resource shall realize the benefit through the actual reduction in its annual system coincident peak load, shall not receive credit for a resource and, therefore, is not required to participate in the qualification process described in this Section III.13.1. All designations as a Self-Supplied FCA Resource in the Forward Capacity Auction qualification process are binding.

# III.13.1.6.1. Self-Supplied FCA Resource Eligibility.

Where all or a portion of a resource is designated as a Self-Supplied FCA Resource, it shall also maintain its status as a New Generating Capacity Resource, Existing Generating Capacity Resource, New Import Capacity Resource or Existing Import Capacity Resource, and must satisfy the Forward Capacity Auction qualification process requirements set forth in the remainder of Section III.13.1 applicable to that resource type, in addition to the requirements of this Section III.13.1.6. Where an offer composed of separate resources is designated as a Self-Supplied FCA Resource, all of the requirements and deadlines specified in Section III.13.1.5 shall apply to that offer, in addition to the requirements of this Section III.13.1.6. The total quantity of capacity that an load serving entity designates as Self-Supplied FCA Resources may not exceed the load serving entity's projected share of the Installed Capacity Requirement during the Capacity Commitment Period which shall be calculated by determining the load serving entity's most recent percentage share of the Installed Capacity Requirement multiplied by the projected Installed Capacity Requirement for the commitment year. No resource may be designated as a Self-Supplied FCA Resource for more MW than the lesser of that resource's summer Qualified Capacity and winter Qualified Capacity.

# III.13.1.6.2. Locational Requirements for Self-Supplied FCA Resources.

In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource for a load in an import-constrained Capacity Zone, the Self-Supplied FCA Resource must be located in the same Capacity Zone as the associated load, unless the Self-Supplied FCA Resource is a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights. In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource in an export-constrained Capacity Zone for a load outside that export-constrained Capacity Zone, the Self-Supplied FCA Resource must be a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights.

## III.13.1.7. Internal Market Monitor Review of Offers and Bids.

In addition to the other provisions of this Section III.13.1, the Internal Market Monitor shall have the authority to review in the qualification process each resource's summer and winter Seasonal Claimed Capability if it is significantly lower than historical values, and if the Internal Market Monitor determines that it may be an attempt to exercise physical withholding, the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)). Where an entity submits: (i) an offer as a New Generating Capacity Resource, a New Import Capacity Resource or a New Demand Resource; and (ii) a Static De-List Bid, a Permanent De-List Bid, an Export Bid or an Administrative Export De-List Bid in the same

Forward Capacity Auction, the Internal Market Monitor shall take appropriate steps to ensure that the resource bid to de-list or export in the Forward Capacity Auction is not inappropriately replaced by that new capacity in a subsequent reconfiguration auction or Capacity Supply Obligation Bilateral. In its review of any offer or bid pursuant to this Section III.13.1.7, the Internal Market Monitor may consult with the Project Sponsor or Market Participant, as appropriate, to seek clarification, or to address questions or concerns regarding the materials submitted.

#### III.13.1.8. Publication of Offer and Bid Information.

- (a) Resource name, quantity, price, and Load Zone (or interface, as applicable) in which the resource is located about each Permanent De-list Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (b) The quantity, price, and Load Zone (or interface, as applicable) in which the resource is located of each Static De-List Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (c) Name of submitter, quantity, and interface of Export Bids and Administrative Export Bids shall be published no later than 15 days after the Forward Capacity Auction is conducted.
- (d) Name of submitter, quantity, and interface about offers from New Import Capacity Resources shall be published no later than 15 days after the Forward Capacity Auction is conducted.
- (e) If a Permanent De-List Bid above \$1.00/kW-month or a Static De-List Bid is approved by the Internal Market Monitor, resource name, quantity, price, and Load Zone (or interface, as applicable) in which the resource is located shall be published no later than 15 days after the Forward Capacity Auction is conducted.
- (f) The name of each Lead Market Participant submitting de-list bids, as well as the number and type of de-list bids submitted by each Lead Market Participant, shall be published no later than three Business Days after the ISO issues the qualification determination notifications described in Sections III.13.1.1.2.8, III.13.1.2.4, and III.13.1.3.5.7. Authorized Persons of Authorized Commissions will be provided confidential access to full information about posted Static De-list Bids and Permanent De-List Bids upon request pursuant to Section 3.3 of the ISO New England Information Policy.

#### III.13.1.9. Financial Assurance.

Except as noted in this Section III.13.1.9, all financial assurance requirements associated with Forward Capacity Auctions and annual reconfiguration auctions and other payments and charges resulting from the Forward Capacity Market shall be governed by the ISO New England Financial Assurance Policy. The ISO and the NEPOOL Budget and Finance Subcommittee shall reconsider these financial assurance requirements no later than five years after the first Forward Capacity Auction is conducted.

# III.13.1.9.1. Financial Assurance for New Generating Capacity Resources and New Demand Resources Participating in the Forward Capacity Auction.

In order to participate in any Forward Capacity Auction, New Generating Capacity Resources (including Conditional Qualified New Generating Capacity Resources) and New Demand Resources shall be required to meet the financial assurance requirements as described in the ISO New England Financial Assurance Policy. Timely payment of the financial assurance deposit specified in the ISO New England Financial Assurance Policy by the Project Sponsor for a New Generating Capacity Resource or New Demand Resource accepted for participation in the Forward Capacity Auction constitutes a commitment to offer the full FCA Qualified Capacity of that New Generating Capacity Resource or New Demand Resource in the Forward Capacity Auction at the starting price. If this financial assurance deposit is not received within the timeframe specified in the ISO New England Financial Assurance Policy, the New Generating Capacity Resource or New Demand Resource shall not be permitted to participate in the Forward Capacity Auction. If capacity offered by the New Generating Capacity Resource or New Demand Resource clears in the Forward Capacity Auction, the deposit shall be applied toward the resource's financial assurance obligation, as described in the ISO New England Financial Assurance Policy. If no capacity offered by that New Generating Capacity Resource or New Demand Resource clears in the Forward Capacity Auction, the deposit will be returned pursuant to the terms of the ISO New England Financial Assurance Policy.

# III.13.1.9.2. Financial Assurance for New Generating Capacity Resources and New Demand Resources Clearing in a Forward Capacity Auction.

Where a New Generating Capacity Resource's offer or a New Demand Resource's offer is accepted in a Forward Capacity Auction, that resource must provide financial assurance as described in the ISO New England Financial Assurance Policy.

## III.13.1.9.2.1. Failure to Provide Financial Assurance or to Meet Milestone.

If a New Generating Capacity Resource or New Demand Resource: (i) fails to provide the required financial assurance on any required date for any reason; or (ii) has its Capacity Supply Obligation terminated by the ISO pursuant to Section III.13.3.4(c), it shall lose its Capacity Supply Obligation (which shall then be entered by the ISO into subsequent annual reconfiguration auctions) and its right to any payments associated with that Capacity Supply Obligation, and it shall forfeit any financial assurance provided with respect to that Capacity Supply Obligation.

#### III.13.1.9.2.2. Release of Financial Assurance.

Once a New Generating Capacity Resource or New Demand Resource achieves Commercial Operation and is tested for its capacity rating, its financial assurance obligation shall be released pursuant to the terms of the ISO New England Financial Assurance Policy and it shall have the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy. If a New Generating Capacity Resource or New Demand Resource is only capable of delivering less than the amount of capacity that cleared in the Forward Capacity Auction, then the portion of its financial assurance associated with the shortfall shall be forfeited. Any resulting shortfall in capacity shall then be entered by the ISO into subsequent annual reconfiguration auctions.

# III.13.1.9.2.2.1. [Reserved.]

#### III.13.1.9.2.3. Forfeit of Financial Assurance.

Where any financial assurance is forfeited pursuant to the provisions of this Section III.13, there shall be no further coverage for such forfeit under the ISO New England Billing Policy. Any financial assurance that is forfeited pursuant to the provisions of this Section III.13 shall be used to reduce payments incurred by load in the relevant Capacity Zone to replace that capacity.

## **III.13.1.9.2.4.** Financial Assurance for New Import Capacity Resources.

A New Import Capacity Resource that is backed by a new External Resource shall be subject to the same financial assurance requirements as a New Generating Capacity Resource, as described in Section III.13.1.9.1 and Section III.13.1.9.2. Once the new External Resource achieves Commercial Operation, the New Import Capacity Resource shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as described in Section III.13.1.9. A New Import Capacity Resource that is backed by one or more existing External Resources or by an external Control Area shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy.

#### III.13.1.9.3. Qualification Process Cost Reimbursement Deposit.

For each New Capacity Show of Interest Form and New Demand Resource Show of Interest Form submitted for the purposes of qualifying for either a Forward Capacity Auction or reconfiguration auction, the Project Sponsor must submit to the ISO a refundable deposit in the amount shown in the table below ("Qualification Process Cost Reimbursement Deposit"). The Qualification Process Cost Reimbursement Deposit must be received in accordance with the ISO New England Billing Policy. Such deposit shall be used for costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3. An additional Qualification Process Cost Reimbursement Deposit is not required if: (i) the Project Sponsor is actively seeking qualification for another Forward Capacity Auction or annual reconfiguration auction, or is having the project's critical path schedule monitored pursuant to Section III.13.3; and (ii) the costs already incurred in the qualification process and critical path schedule monitoring do not equal or exceed 90 percent of the amount of the previously-submitted Qualification Process Cost Reimbursement Deposit(s). The ISO shall provide the Project Sponsor with an annual statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. In any case where resources are aggregated or disaggregated, the associated Qualification Process Cost Reimbursement Deposits will be adjusted as appropriate. After aggregation or disaggregation of resources, historical data regarding the costs already incurred in the qualification process of the original resources will no longer be provided. Coincident with the issuance of the annual statement, where incurred costs are equal to or greater than 90 percent of the Qualification Process Cost Reimbursement Deposit(s) previously submitted, the ISO will issue an invoice in the amount determined pursuant to the Qualification Process Cost Reimbursement Deposit table contained in Section III.13.1.9.3.1 plus any excess of costs incurred to date by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3. Any refunds that may result from aggregation of resources will be issued coincident with the annual statement. Payment on the invoice must be received in accordance with the ISO New England Billing Policy. If the Project Sponsor fails to pay the amount due by the stated due date, the ISO will consider the resources that were invoiced withdrawn by the Project Sponsor. Such a withdrawal shall be irrevocable, and payment on the invoice after the due date will not remedy the failure to pay or the withdrawal.

#### III.13.1.9.3.1. Partial Waiver Of Deposit.

A portion of the deposit shall be waived when there is an active Interconnection Request and an executed Interconnection Feasibility Study Agreement or Interconnection System Impact Study Agreement under Schedule 22 or 23 of the OATT or where a resource modification does not require a revision to the Interconnection Agreement.

| New Generating<br>Resources ≥ 20<br>MW | New Generating<br>Resources < 20<br>MW and ≥ 2 MW | Imports and New<br>Demand Resources<br>(including<br>Distributed<br>Generation) | New Generating<br>Resources < 2 MW |
|--|---|---|------------------------------------|
| Including Up-rates,                    | Including Up-rates,                               |   |                                    |
| Re-powering,                           | Re-powering,                                      |   |                                    |
| Environmental                          | Environmental                                     |   |                                    |
| Compliance &                           | Compliance &                                      |   |                                    |
| Intermittent Power                     | Intermittent Power                                |   |                                    |
| Resources                              | Resources   |   |                                    |
| \$25,000                               | \$7,500   | \$1,000   | \$500                              |
| With Executed                          | With Executed                                     |   |                                    |
| Interconnection                        | Interconnection                                   |   |                                    |
| Feasibility Study                      | Feasibility Study                                 |   |                                    |
| Agreement or                           | Agreement or                                      |   |                                    |
| System Impact                          | System Impact                                     |   |                                    |
| Study Agreement                        | Study Agreement                                   |   |                                    |
| \$15,000                               | \$6500  | n/a   | n/a                                |

## III.13.1.9.3.2. Settlement of Costs.

# III.13.1.9.3.2.1. Settlement Of Costs Associated With Resources Participating In A Forward Capacity Auction Or Reconfiguration Auction.

Upon the latter of: (i) the first day of the Capacity Commitment Period for which a resource offers into the Forward Capacity Market or (ii) the date on which the entire resource is accepted by the ISO for Commercial Operation, the ISO shall provide the Project Sponsor with a statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. If any portion of the Qualification Process Cost Reimbursement Deposit exceeds the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s) associated with the qualification process and critical path schedule monitoring, the ISO shall refund to the Project Sponsor the excess including interest calculated in accordance with 18 CFR § 35.19a(a)(2). If the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the

qualification process and critical path schedule monitoring exceed the Qualification Process Cost Reimbursement Deposit, the Project Sponsor shall pay such excess, including interest calculated in accordance with 18 CFR § 35.19a(a)(2) – For Demand Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

# III.13.1.9.3.2.2. Settlement Of Costs Associated With Resources That Withdraw From A Forward Capacity Auction Or Reconfiguration Auction.

Upon the withdrawal or failure to meet the requirements of the qualification process set forth in Section III.13.1, the ISO shall provide the Project Sponsor with a statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. A Project Sponsor that withdraws or is deemed to have withdrawn its request for qualification shall pay to the ISO all costs prudently incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. The ISO shall refund to the Project Sponsor any portion of the Qualification Process Cost Reimbursement Deposit that exceeds the costs associated with the qualification process and critical path schedule monitoring incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), including interest calculated in accordance with 18 CFR § 35.19a(a)(2). The ISO shall charge the Project Sponsor the amount of such costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), that exceeds the Qualification Process Cost Reimbursement Deposit, including interest calculated in accordance with 18 CFR § 35.19a(a)(2). For Demand Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

# III.13.1.9.3.2.3. Crediting Of Reimbursements.

Cost reimbursements received (excluding amounts passed through to the ISO's consultants and to affected Transmission Owner(s)) by the ISO pursuant to this Section III.13.1.9.3.2 shall be credited against revenues received by the ISO pursuant to Section IV.A.6.1 of the Transmission, Markets and Services Tariff.

#### III.13.1.10. Forward Capacity Auction Qualification Schedule.

The table below provides the major dates and deadlines for each of the first eight Forward Capacity Auctions.

| New Capacity Show of<br>Interest Submission<br>Window  | Existing<br>Capacity<br>Qualification<br>Deadline | New Capacity Qualification Deadline | First Day of Forward Capacity Auction for the Capacity Commitment Period | Capacity Commitment<br>Period Begins |
|--|---|-------------------------------------|--|--------------------------------------|
| For all resources except Demand Resources, Nov. 1, 2006 through Jan. 2, 2007 For Demand Resources, Dec. 18, 2006 through Feb. 28, 2007 | Apr. 30, 2007                                     | June 15, 2007                       | Feb. 4, 2008   | June 1, 2010                         |
| Sept. 18, 2007 through<br>Nov. 14, 2007  | Mar. 14, 2008                                     | Apr. 29, 2008                       | Dec. 8, 2008   | June 1, 2011                         |
| July 15, 2008 through<br>Sep. 16, 2008   | Feb. 3, 2009                                      | Feb. 17, 2009                       | Oct. 5, 2009   | June 1, 2012                         |
| May 15, 2009 through<br>July 14, 2009  | Dec. 1, 2009                                      | Dec. 15, 2009                       | Aug. 2, 2010   | June 1, 2013                         |
| Mar. 15, 2010 through<br>May 14, 2010  | Oct. 1, 2010                                      | Oct. 15, 2010                       | June 6, 2011   | June 1, 2014                         |
| Mar. 1, 2011 through<br>Mar. 14, 2011  | Aug. 1, 2011                                      | Aug. 15, 2011                       | Apr. 2, 2012   | June 1, 2015                         |
| Jan. 3, 2012 through<br>Jan. 17, 2012  | June 1, 2012                                      | June 15, 2012                       | Feb. 4, 2013   | June 1, 2016                         |
| Feb. 14, 2013 through<br>Feb. 28, 2013   | June 3, 2013                                      | June 17, 2013                       | Feb. 3, 2014   | June 1, 2017                         |

Beginning with the timeline for the Capacity Commitment Period beginning on June 1, 2017 (the eighth Forward Capacity Auction), and for each Capacity Commitment Period thereafter, the deadlines will be consistent for each Capacity Commitment Period, as follows:

- (a) each Capacity Commitment Period shall begin in June;
- (b) the New Capacity Show of Interest Submission Window will be in February (after the Forward Capacity Auction for the prior Capacity Commitment Period), approximately four years and three months before the beginning of the Capacity Commitment Period;
- (c) the Existing Capacity Qualification Deadline will be in June just over four years before the beginning of the Capacity Commitment Period;
- (d) the New Capacity Qualification Deadline will be in June or July that is just under four years before the beginning of the Capacity Commitment Period; and
- (e) the Forward Capacity Auction for the Capacity Commitment Period will begin in February approximately three years and four months before the beginning of the Capacity Commitment Period.

The table below shows this generic timeline for the Capacity Commitment Period beginning in yer "X", where X is any year after 2015.

|              |               |                 | First Day of    |                     |
|--------------|---------------|-----------------|-----------------|---------------------|
|              |               |                 | Forward         |                     |
| New Capacity |               |                 | Capacity        |                     |
| Show of      | Existing      |                 | Auction for the |                     |
| Interest     | Capacity      | New Capacity    | Capacity        |                     |
| Submission   | Qualification | Qualification   | Commitment      | Capacity Commitment |
| Window       | Deadline      | Deadline        | Period          | Period Begins       |
| Feb. (X-4)   | June (X-4)    | June/July (X-4) | Feb. (X-3)      | June X              |

# III.13.5. Bilateral Contracts in the Forward Capacity Market.

Market Participants shall be permitted to enter into Capacity Supply Obligation Bilaterals, Capacity Load Obligation Bilaterals and Supplemental Availability Bilaterals in accordance with this Section III.13.5, with the ISO serving as Counterparty in each such transaction. Market Participants may not offset a Capacity Load Obligation with a Capacity Supply Obligation.

## III.13.5.1. Capacity Supply Obligation Bilaterals.

A resource having a Capacity Supply Obligation seeking to shed that obligation ("Capacity Transferring Resource") may enter into a bilateral transaction to transfer its Capacity Supply Obligation, in whole or in part ("Capacity Supply Obligation Bilateral"), to a resource, or portion thereof, having Qualified Capacity for that Capacity Commitment Period that is not already obligated ("Capacity Acquiring Resource"), subject to the following limitations

- (a) A monthly Capacity Supply Obligation Bilateral must be coterminous with a calendar month, and an annual Capacity Supply Obligation Bilateral must be coterminous with a Capacity Commitment Period.
- (b) A Capacity Supply Obligation Bilateral may not transfer a Capacity Supply Obligation amount that is greater than the lowest monthly Capacity Supply Obligation of the Capacity Transferring Resource during the period covered by the Capacity Supply Obligation Bilateral. A Capacity Supply Obligation Bilateral may not transfer a Capacity Supply Obligation amount that is greater than the lowest monthly amount of unobligated Qualified Capacity (that is, Qualified Capacity as determined in the most recent Forward Capacity Auction or reconfiguration auction qualification process that is not subject to a Capacity Supply Obligation for the relevant time period) of the Capacity Acquiring Resource during the period covered by the Capacity Supply Obligation Bilateral, as determined in the qualification process for the most recent Forward Capacity Auction or annual reconfiguration auction prior to the submission of the Capacity Supply Obligation Bilateral to the ISO.
- (c) A Capacity Supply Obligation Bilateral may not transfer a Capacity Supply Obligation to a Capacity Acquiring Resource where that Capacity Acquiring Resource's unobligated Qualified Capacity is unobligated as a result of an Export Bid or Administrative Export De-List Bid that cleared in the Forward Capacity Auction.

(d) A Real-Time Emergency Generation Resource may participate in a Capacity Supply Obligation Bilateral as either a Capacity Transferring Resource or a Capacity Acquiring Resource, provided, however, that where a Real-Time Emergency Generation Resource participates in a Capacity Supply Obligation Bilateral as a Capacity Acquiring Resource, the Capacity Transferring Resource must also be a Real-Time Emergency Generation Resource.

## (e) [Reserved.]

- (f) The Capacity Transferring Resource and the Capacity Acquiring Resource that are parties to a Capacity Supply Obligation Bilateral must be located in the same Capacity Zone, or the path from the Capacity Transferring Resource to the Capacity Acquiring Resource must flow across adjacent Capacity Zones in the direction of the modeled interface constraint(s), as such Capacity Zones and interface constraints are defined following the Forward Capacity Auction conducted for the Capacity Commitment Period to which the transferred Capacity Supply Obligation applies.
- (g) If the Capacity Acquiring Resource is an Import Capacity Resource, then the Capacity Transferring Resource must also be an Import Capacity Resource on the same external interface.
- (h) A resource, or a portion thereof, that has been designated as a Self-Supplied FCA Resource may transfer the self-supplied portion of its Capacity Supply Obligation by means of Capacity Supply Obligation Bilateral. In such a case, however, the Capacity Acquiring Resource shall not become a Self-Supplied FCA Resource as a result of the transaction.
- (i) A monthly Capacity Supply Obligation may not be acquired by any resource on an approved outage for the relevant Capacity Commitment Period month.
- (j) A resource that has not achieved Commercial Operation by the submission deadline for a monthly Capacity Supply Obligation Bilateral may not submit a transaction as a Capacity Acquiring Resource for that Capacity Commitment Period month, unless the resource has a negative Capacity Supply Obligation, in which case it may submit a Capacity Supply Obligation Bilateral in an amount up to the absolute value of its Capacity Supply Obligation.

#### III.13.5.1.1. Process for Approval of Capacity Supply Obligation Bilaterals.

# III.13.5.1.1.1. Timing.

The Lead Market Participant or Project Sponsor for either the Capacity Transferring Resource or the Capacity Acquiring Resource may submit a Capacity Supply Obligation Bilateral to the ISO during submittal windows, as defined in the ISO New England Manuals and ISO New England Operating Procedures. The ISO will issue a submission schedule for annual Capacity Supply Obligation Bilaterals as soon as practicable after the issuance of Forward Capacity Auction results. Monthly Capacity Supply Obligation Bilaterals may only be submitted and confirmed after the results of the third annual reconfiguration auction have been issued (except as described in Section III.13.4.2.1.3(c)) and prior to the closing of the monthly Capacity Supply Obligation Bilateral window, which will occur prior to the monthly reconfiguration auction. ISO New England will review all confirmed monthly Capacity Supply Obligation Bilaterals for each upcoming Obligation Month for reliability needs immediately preceding the monthly reconfiguration auction. A Capacity Supply Obligation Bilateral must be confirmed by the party other than the party submitting the Capacity Supply Obligation Bilateral to the ISO during the same submittal window and no later than the same deadline that applies to submission of the Capacity Supply Obligation Bilateral.

#### **III.13.5.1.1.2.** Application.

The submission of a Capacity Supply Obligation Bilateral to the ISO shall include the following: (i) the resource identification number of the Capacity Transferring Resource; (ii) the amount of the Capacity Supply Obligation being transferred in MW amounts up to three decimal places; (iii) the term of the transaction; and (iv) the resource identification number of the Capacity Acquiring Resource. If the parties to a Capacity Supply Obligation Bilateral so choose, they may also submit a price, in \$/kW-month, to be used by the ISO in settling the Capacity Supply Obligation Bilateral. If no price is submitted, the ISO shall use a default price of \$0.00/kW-month.

#### III.13.5.1.1.3. ISO Review.

- (a) The ISO shall review the information provided in support of the Capacity Supply Obligation Bilateral, and shall reject the Capacity Supply Obligation Bilateral if any of the provisions of this Section III.13.5.1 are not met.
- (b) Each Capacity Supply Obligation Bilateral shall be subject to a reliability review by the ISO to determine whether the transaction would result in a violation of any NERC or NPCC (or their successors) criteria, or ISO New England System Rules, during the Capacity Commitment Period associated with the transaction. Capacity Supply Obligation Bilaterals shall be reviewed by the ISO to ensure the regional and

local adequacy achieved through the Forward Capacity Auction and other reliability needs are maintained. The ISO's review will consider the location and operating and rating limitations of resources associated with the Capacity Supply Obligation Bilateral to ensure reliability standards will remain satisfied if the capacity associated with the Capacity Transferring Resource is withdrawn and the capacity associated with the Capacity Acquiring Resource is accepted. The ISO's reliability reviews will assess transactions based on operable capacity needs while considering any approved or interim approved transmission outage information and any approved generation or Demand Response Resource outage information, and will include transmission security studies. For a monthly Capacity Supply Obligation Bilateral, the ISO shall obtain and consider information from the Local Control Center regarding whether the Capacity Supply Obligation of the Capacity Transferring Resource is needed for local system conditions and whether it is adequately replaced by the Acquiring Resource. The ISO will approve or reject Capacity Supply Obligation Bilaterals based on the order in which they are confirmed. If multiple Capacity Supply Obligation Bilaterals are submitted between the same resources, they may be reviewed together as one transaction and the most recent confirmation time among the related transactions will be used to determine the review order of the grouped transaction. Transactions that cannot meet the applicable reliability needs will only be accepted or rejected in their entirety and the resources will not be accepted or rejected in part for purposes of that transaction. Where the ISO has determined that a Capacity Supply Obligation Bilateral must be rejected for reliability reasons the Lead Market Participant or Project Sponsor, as appropriate, for the Capacity Transferring Resource and the Capacity Acquiring Resource shall be notified as soon as practicable of the rejection and of the reliability need prompting such rejection.

(c) Each Capacity Supply Obligation Bilateral shall be subject to a financial assurance review by the ISO. If the Capacity Transferring Resource and the Capacity Acquiring Resource are not both in compliance with all applicable provisions of the ISO New England Financial Assurance Policy, including those regarding Capacity Supply Obligation Bilaterals, the ISO shall reject the Capacity Supply Obligation Bilateral.

## III.13.5.1.1.4. Approval.

Upon approval of a Capacity Supply Obligation Bilateral, the Capacity Supply Obligation of the Capacity Transferring Resource shall be reduced by the amount set forth in the Capacity Supply Obligation Bilateral, and the Capacity Supply Obligation of the Capacity Acquiring Resource shall be increased by the amount set forth in the Capacity Supply Obligation Bilateral.

# III.13.5.2. Capacity Load Obligations Bilaterals.

A Market Participant having a Capacity Load Obligation seeking to shed that obligation ("Capacity Load Obligation Transferring Participant") may enter into a bilateral transaction to transfer all or a portion of its Capacity Load Obligation in a Capacity Zone ("Capacity Load Obligation Bilateral") to any Market Participant seeking to acquire a Capacity Load Obligation ("Capacity Load Obligation Acquiring Participant"). A Capacity Load Obligation Bilateral must be in whole calendar month increments, may not exceed one year in duration, and must begin and end within the same Capacity Commitment Period. A Capacity Load Obligation Transferring Participant will be permitted to transfer, and a Capacity Load Obligation Acquiring Participant will be permitted to acquire, a Capacity Load Obligation if after entering into a Capacity Load Obligation Bilateral and submitting related information to the ISO within the specified submittal time period, the ISO approves such Capacity Load Obligation Bilateral.

## III.13.5.2.1. Process for Approval of Capacity Load Obligation Bilaterals.

# III.13.5.2.1.1. Timing.

Either the Capacity Load Obligation Transferring Participant or the Capacity Load Obligation Acquiring Participant may submit a Capacity Load Obligation Bilateral to the ISO. All Capacity Load Obligation Bilaterals must be submitted to the ISO in accordance with resettlement provisions as described in ISO New England Manuals. However, to be included in the initial settlement of payments and charges associated with the Forward Capacity Market for the first month of the term of the Capacity Load Obligation Bilateral, a Capacity Load Obligation Bilateral must be submitted to the ISO no later than 12:00 pm on the second Business Day after the end of that month (though a Capacity Load Obligation Bilateral submitted at that time may be revised by the parties to the transaction throughout the resettlement process). A Capacity Load Obligation Bilateral must be confirmed by the party other than the party submitting the Capacity Load Obligation Bilateral to the ISO no later than the same deadline that applies to submission of the Capacity Load Obligation Bilateral.

## **III.13.5.2.1.2.** Application.

The submission of a Capacity Load Obligation Bilateral to the ISO shall include the following: (i) the amount of the Capacity Load Obligation being transferred in MW amounts up to three decimal places; (ii) the term of the transaction; (iii) identification of the Capacity Load Obligation Transferring Participant and the Capacity Load Obligation Acquiring Participant; and (iv) the Capacity Zone in which the Capacity Load Obligation is being transferred is located.

#### III.13.5.2.1.3. ISO Review.

The ISO shall review the information provided in support of the Capacity Load Obligation Bilateral and shall reject the Capacity Load Obligation Bilateral if any of the provisions of this Section II.13.5.2 are not met.

#### III.13.5.2.1.4. Approval.

Upon approval of a Capacity Load Obligation Bilateral, the Capacity Load Obligation of the Capacity Load Obligation Transferring Participant in the Capacity Zone specified in the submission to the ISO shall be reduced by the amount set forth in the Capacity Load Obligation Bilateral and the Capacity Load Obligation of the Capacity Load Obligation Acquiring Participant in the specified Capacity Zone shall be increased by the amount set forth in the Capacity Load Obligation Bilateral.

## III.13.5.3. Supplemental Availability Bilaterals.

A resource's availability score during a Shortage Event may be supplemented by entering into a Supplemental Availability Bilateral as described in this Section III.13.5.3.

## III.13.5.3.1. Designation of Supplemental Capacity Resources.

# **III.13.5.3.1.1.** Eligibility.

Demand Response Capacity Resources and Generating Capacity Resources that are not Intermittent Power Resources or Settlement Only Resources may be designated as Supplemental Capacity Resources. A Generating Capacity Resource may be designated as a Supplemental Capacity Resource in a MW amount up to the difference between the resource's CNR Capability (reduced by the hourly integrated delivered MW for any External Transaction sale or sales submitted in accordance with Section III.1.10.7(f) from that resource and its Capacity Supply Obligation in each day of the term in which it is designated to be a Supplemental Capacity Resource. A Demand Response Capacity Resource may be designated as a Supplemental Capacity Resource in a MW amount up to the difference between the resource's Qualified Capacity from the Forward Capacity Auction for the current Capacity Commitment Period pursuant to Section III.13.1.4.1 and its Capacity Supply Obligation in each day of the term in which it is designated to be a Supplemental Capacity Resource.

# III.13.5.3.1.2. Designation.

The designation of a Supplemental Capacity Resource must be made by the resource's Lead Market Participant. The designation shall indicate the term for which the resource is designated as a Supplemental Capacity Resource, which shall be in Operating Day increments, no less than one Operating Day, and no greater than one calendar month. Such designation shall indicate the MW amount being designated as a Supplemental Capacity Resource, and the Capacity Zone in which the resource is located. Such designation must be submitted to the ISO no later than the deadline for the submission of Supply Offers in the Day-Ahead Energy Market for the first Operating Day of the indicated term.

#### III.13.5.3.1.3. ISO Review.

The ISO shall review the information provided in submission of the designation as a Supplemental Capacity Resource, and shall reject the designation for any of the hours in which any of the provisions of this Section III.13.5.3.1 are not met.

## III.13.5.3.1.4. Effect of Designation.

Regardless of whether it ever becomes subject to a Supplemental Availability Bilateral as described in Section III.13.5.3.2, the portion of a resource designated as a Supplemental Capacity Resource is subject to the same energy market offer requirements applicable to a resource having a Capacity Supply Obligation as described in Sections III.13.6.1.1.1 and III.13.6.1.1.2 for Generating Capacity Resources and as described in Sections III.13.6.1.5.1. and III.13.6.1.5.2. for Demand Response Capacity Resources for the entire term indicated in the designation described in Section III.13.5.3.1.2.

## III.13.5.3.2. Submission of Supplemental Availability Bilaterals.

The Lead Market Participant for a resource previously designated as a Supplemental Capacity Resource in accordance with the provisions of Section III.13.5.3.1 for a term that included a Shortage Event may submit a Supplemental Availability Bilateral to the ISO assigning all or a portion of its available capability up to its designated supplemental capacity in each hour of that Shortage Event to a Generating Capacity Resource or Demand Response Capacity Resource having a Capacity Supply Obligation during that Shortage Event ("Supplemented Capacity Resource"). No other Market Participant may submit a Supplemental Availability Bilateral. The Supplemental Capacity Resource and the Supplemented Capacity Resource must either: (i) be located in the same Reserve Zone (although in no case may a Supplemental Capacity Resource located in an export-constrained Capacity Zone provide supplemental availability outside of that export-constrained Capacity Zone); or (ii) be located in different Reserve Zones such that direction of flow between the Supplemental Capacity Resource and the Supplemented Capacity Resource is counter to any Reserve Zone or Capacity Zone constraint. For purposes of this Section III.13.5.3.2, a Reserve Zone having a locational reserve requirement (established pursuant to Section III.9.2.2) that is less than or equal to zero shall be considered to be unconstrained with respect to

the neighboring Reserve Zone. A Supplemental Capacity Resource may submit Supplemental Availability Bilaterals with multiple Supplemented Capacity Resources, but each MW of supplemental capacity may only be assigned to one Supplemented Capacity Resource. No Supplemental Capacity Resource may itself be a Supplemented Capacity Resource for an hour.

#### III.13.5.3.2.1. Timing.

A Supplemental Availability Bilateral must be submitted in accordance with resettlement provisions as described in ISO New England Manuals. However, to be included in the initial settlement of payments and charges associated with the Forward Capacity Market for the month associated with the Supplemental Availability Bilateral, a Supplemental Availability Bilateral must be submitted to the ISO no later than 12:00 pm on the second Business Day after the end of that month, or at such later deadline as specified by the ISO upon notice to Market Participants (though a Supplemental Availability Bilateral may be revised by the parties to the transaction throughout the resettlement process). A Supplemental Availability Bilateral must be confirmed by the Lead Market Participant for the Supplemented Capacity Resource no later than the same deadline that applies to submission of the Supplemental Availability Bilateral.

#### **III.13.5.3.2.2.** Application.

The submission of a Supplemental Availability Bilateral to the ISO shall include the following: (i) the resource identification number for the Supplemental Capacity Resource; (ii) the resource identification number for the Supplemented Capacity Resource; (iii) the MW amount of capacity being assigned from the Supplemental Capacity Resource to the Supplemented Capacity Resource; (iv) the term of the transaction, which shall be in hourly increments coinciding with hourly boundaries, no less than one hour, and no greater than one calendar month.

# III.13.5.3.2.3. ISO Review.

The ISO shall review the information provided in submission of the Supplemental Availability Bilateral, and shall reject the Supplemental Availability Bilateral if any of the provisions of this Section III.13.5.3 are not met. The ISO shall reject the applicability of a Supplemental Availability Bilateral in any hour of a Shortage Event unless: (i) the Supplemental Capacity Resource was on-line and following ISO dispatch instructions during that hour of the Shortage Event and the MW amount of capacity being assigned from the Supplemental Capacity Resource is (a) less than or equal to the difference between the Generating Capacity Resource's Economic Maximum Limit as submitted or redeclared by the Lead Market Participant and the Supplemental Capacity Resource's Capacity Supply Obligation or (b) less than or equal to the difference between (the greater of the Demand Response Capacity Resource's Real-Time

Demand Reduction Obligation plus Net Supply or the lesser of ((the Demand Response Capacity Resource's Demand Response Baseline as adjusted pursuant to Section III.8B.5, plus the Economic Maximum Limit for any associated available Net Supply Generator Assets), the Hourly Adjusted Audited Demand Reduction, or (the Maximum Reduction as submitted or redeclared by the Lead Market Participant plus the Economic Maximum Limit of associated Net Supply Generator Assets))), adjusted for average avoided peak transmission and distribution losses as addressed in Section III.13.7.1.5.10, and the Supplemental Capacity Resource's Capacity Supply Obligation; or (ii) the Supplemental Capacity Resource was offline for the hour of the Shortage Event and the MW amount of capacity being assigned from the Supplemental Capacity Resource is less than or equal to the difference between the sum of the Supplemental Capacity Resource's Real-Time Reserve Designations of TMNSR and TMOR and the Supplemental Capacity Resource's Capacity Supply Obligation.

## III.13.5.3.2.4. Effect of Supplemental Availability Bilateral.

A Supplemental Availability Bilateral does not affect in any way either party's Capacity Supply Obligation or the rights and obligations associated therewith. The sole effect of a Supplemental Availability Bilateral is to modify the Supplemented Capacity Resource's availability score as described in Section III.13.7.1.1.4.

# III.13.6. Rights and Obligations.

Resources assuming a Capacity Supply Obligation through a Forward Capacity Auction or resources assuming or shedding a Capacity Supply Obligation through a reconfiguration auction or a Capacity Supply Obligation Bilateral shall comply with this Section III.13.6 for each Capacity Commitment Period. In the event a resource with a Capacity Supply Obligation assumed through a Forward Capacity Auction, reconfiguration auction, or Capacity Supply Obligation Bilateral can not be allowed to shed its Capacity Supply Obligation due to system reliability considerations, the resource shall maintain the Capacity Supply Obligation until the resource can be released from its Capacity Supply Obligation. No additional compensation shall be provided through the Forward Capacity Market if the resource fails to be released from its Capacity Supply Obligation.

# III.13.6.1. Resources with Capacity Supply Obligations.

A resource with a Capacity Supply Obligation assumed through a Forward Capacity Auction, reconfiguration auction, or a Capacity Supply Obligation Bilateral shall comply with the requirements of this Section III.13.6.1 during the Capacity Commitment Period, or portion thereof, in which the Capacity Supply Obligation applies.

# III.13.6.1.1. Generating Capacity Resources.

## III.13.6.1.1.1. Energy Market Offer Requirements.

A Generating Capacity Resource having a Capacity Supply Obligation shall be offered into both the Day-Ahead Energy Market and Real-Time Energy Market at a MW amount equal to or greater than its Capacity Supply Obligation whenever the resource is physically available. If the resource is physically available at a level less than its Capacity Supply Obligation, however, the resource shall be offered into both the Day-Ahead Energy Market and Real-Time Energy Market at that level. Day-Ahead Energy Market Supply Offers from such Generating Capacity Resources shall also meet one of the following requirements:

- (a) the sum of the Generating Capacity Resource's notification time plus start time plus minimum run time plus minimum down time is less than or equal to 72 hours; or
- (b) if the Generating Capacity Resource cannot meet the offer requirements in Section III.13.6.1.1.1(a) due to physical design limits, then the resource shall be offered into the Day-Ahead Energy Market at a MW amount equal to or greater than its Economic Minimum Limit at a price of zero

or shall be self-scheduled in the Day-Ahead Energy Market at a MW amount equal to or greater than the resource's Economic Minimum Limit.

# III.13.6.1.1.2. Requirement that Offers Reflect Accurate Generating Capacity Resource Operating Characteristics.

For each day, Day-Ahead Energy Market and Real-Time Energy Market offers for the listed portion of a resource must reflect the then-known unit-specific operating characteristics (taking into account, among other things, the physical design characteristics of the unit) consistent with Good Utility Practice. Resources must re-declare to the ISO any changes to the offer parameters that occur in real time to reflect the known capability of the resource. A resource failing to comply with this requirement shall be subject to economic penalties described in Appendix B, in addition to any applicable availability penalties pursuant to Section III.13.7.2.7.1.2.

## III.13.6.1.1.3. [Reserved.]

# III.13.6.1.1.4. [Reserved.]

# III.13.6.1.1.5. Additional Requirements for Generating Capacity Resources.

Generating Capacity Resources having a Capacity Supply Obligation are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals and ISO New England Operating Procedures;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals and Market Rule 1 and the requirement to provide to the ISO, upon request and as soon as practicable, confirmation of gas volume schedules sufficient to deliver the energy scheduled for each Generating Capacity Resource using natural gas;
- (c) outage requirements in accordance with the ISO New England Manuals and ISO New England Operating Procedures, provided, however, that the portion of a resource having no Capacity Supply Obligation is not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

# III.13.6.1.2. Import Capacity Resources.

# III.13.6.1.2.1. Energy Market Offer Requirements.

A Market Participant must offer energy associated with an Import Capacity Resource with a Capacity Supply Obligation into the Day-Ahead Energy Market and Real-Time Energy Market as one or more External Transactions for every hour of each Operating Day at the same external interface totaling an amount (MW) equal to the Capacity Supply Obligation unless the Import Capacity Resource is associated with an External Resource that is on an outage. In all cases the Import Capacity Resource is subject to the provisions in Section III.13.7 for the entire Capacity Supply Obligation of the Import Capacity Resource. A Market Participant with an Import Capacity Resource that fails to comply with this requirement may be subject to sanctions pursuant to Appendix B, in addition to any applicable availability penalties pursuant to Section III.13.7.2.7.2 for failing to deliver the External Transaction or External Transactions in the energy market as described in the ISO New England System Rules.

The offer requirements of Section III.13.6.1.2.1 will not apply to External Transactions associated with the VJO and NYPA Import Capacity Resources specified in Section III.13.1.3.3(c) for the duration of the contract provided the transactions are self-scheduled in both the Day-Ahead Energy Market and Real-Time Energy Market. If the energy associated with these contracts is not self-scheduled, the offer requirements and provisions of this section will apply to the applicable contract.

- (a) All priced External Transactions associated with an Import Capacity Resource with a Capacity Supply Obligation must be offered each hour at or below the greater of either: (1) the offer threshold specified in Section III.13.6.1.2.1(b) for the Operating Day; (2) the offer threshold determined for the prior Operating Day; and (3) for any priced External Transactions from the New York Control Area the corresponding hourly day-ahead energy price (NYISO Location-Based Marginal Price) at the source interface.
- (b) A daily offer threshold will be determined for each Operating Day and will apply to each hour of the Operating Day. From June 1, 2010 to May 31, 2013 the daily offer threshold is equal to the product of the PER Proxy Unit heat rate as described in Section III.13.7.2.7.1.1.1(b)(iii) and the lower of ultra low-sulfur No. 2 oil measured at New York Harbor plus a seven percent markup for transportation of day-ahead gas measured at the Algonquin City Gate, as determined on a daily basis. After May 31, 2013 the daily offer threshold is equal to the product of the applicable Forward Reserve Heat Rate as described in Section III.9.6.2 and the lower of ultra low-sulfur No. 2 oil measured at New York Harbor plus a seven

percent markup for transportation or day-ahead gas measured at the Algonquin City Gate, as determined on a daily basis.

- (c) Submittal of External Transactions to the Day-Ahead Energy Market in support of a Capacity Supply Obligation for an Import Capacity Resource requires submittal of matching energy transactions to the Real-Time Energy Market; the External Transactions submitted to the Real-Time Energy Market must match the External Transactions submitted to the Day-Ahead Energy Market, subject to the right to submit different prices into the Real-Time Energy Market.
- (d) External Transactions submitted to the Real-Time Energy Market in support of a Capacity Supply Obligation for an Import Capacity Resource must be submitted prior to the offer submission deadline for the Day-Ahead Energy Market the day before the Operating Day for which they are intended to be scheduled.
- (e) A Market Participant submitting a priced External Transaction supporting an Import Capacity Resource with a Capacity Supply Obligation to the Real-Time Energy Market on an external interface where advance transmission reservations are required must link the transaction to the associated transmission reservation and NERC E-Tag no later than one hour before the operating hour in order to be eligible for scheduling in the Real-Time Energy Market. If a Market Participant does not link the transaction to the associated transmission reservation and NERC E-Tag in the Real-Time Energy Market for any hour during which the External Transaction would otherwise have been economically and reliably scheduled in the Real-Time Energy Market, the associated Import Capacity Resource shall be treated as having not delivered energy for the hour despite ISO requested dispatch under Section III.13.7.1.2 and III.13.7.2.7.2. A Market Participant submitting any other External Transaction to the Real-Time Energy Market must comply with the requirements in Section III.1.10.7(e) with respect to linking the transaction to the associated transmission reservation and NERC E-Tag.

## III.13.6.1.2.2. Additional Requirements for Import Capacity Resources.

Import Capacity Resources are subject to the following additional requirements:

(a) information submittal requirements for External Transactions associated with resource or Control Area backed Import Capacity Resources as detailed in the ISO New England Manuals;

- (b) resource backed Import Capacity Resources shall be subject to the outage requirements as detailed in the ISO New England Manuals and ISO New England Operating Procedures. Control Area backed Import Capacity Resources are not subject to such outage requirements;
- (c) resource backed Import Capacity Resources are subject to the voluntary and mandatory rescheduling of maintenance procedures outlined in the ISO New England Operating Procedures and ISO New England Manuals.
- (d) at the time of submittal, each External Transaction shall reference the associated Import Capacity Resource.

#### III.13.6.1.3. Intermittent Power Resources.

## III.13.6.1.3.1. Energy Market Offer Requirements.

Intermittent Power Resources may submit offers into the Day-Ahead Energy Market. Such resources are required to submit offers for use in the Real-Time Energy Market consistent with the characteristics of the resource. Day Ahead projections of output shall be submitted as detailed in the ISO New England Manuals. For purposes of calculating Real-Time NCPC Charges, Intermittent Power Resources shall have a generation deviation of zero.

## III.13.6.1.3.2. [Reserved.]

#### **III.13.6.1.3.3.** Additional Requirements for Intermittent Power Resources.

Intermittent Power Resources are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals;
- (c) complying with outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals.

# III.13.6.1.4. Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources.

#### III.13.6.1.4.1. Energy Market Offer Requirements.

Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Market.

#### **III.13.6.1.4.2.** Additional Requirements for Settlement Only Resources.

Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources having a Capacity Supply Obligation are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals;
- (c) such resources are not subject to outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals.

#### III.13.6.1.5. Demand Resources.

#### III.13.6.1.5.1. Energy Market Offer Requirements.

Seasonal Peak Demand Resources, On-Peak Demand Resources and Real-Time Emergency Generation Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Markets. A Real-Time Demand Response Asset associated with a Real-Time Demand Response Resource may submit Demand Reduction Offers on a Day-Ahead and Real-Time basis pursuant to Appendix E.

A Demand Response Capacity Resource having a Capacity Supply Obligation shall submit Demand Reduction Offers through its Demand Response Resources and submit Supply Offers of any associated Net Supply Generator Assets, into both the Day-Ahead Energy Market and Real-Time Energy Market through its Demand Response Resources and associated Net Supply Generator Assets. The sum of the Demand Reduction Offers and Supply Offers must be equal to or greater than the Demand Response Capacity Resource's Capacity Supply Obligation whenever the Demand Response Resources and associated Net Supply Generator Assets are physically available. If the Net Supply Generator Asset is a Settlement Only Resource, then the Net Supply will not be represented in the offer for the Demand Response Resource. If the Demand Response Resources and associated Net Supply Generator Assets are

physically available at a level less than the Demand Response Capacity Resource's Capacity Supply Obligation, the sum of the Demand Reduction Offers and Supply Offers equal to that level shall be offered into both the Day-Ahead Energy Market and Real-Time Energy Market. Each Demand Reduction Offer from a Demand Response Resource made into the Day-Ahead Energy Market shall also meet one of the following requirements:

- (a) the sum of the Demand Response Resource Notification Time plus Demand Response Resource Start-Up Time plus Minimum Reduction Time plus Minimum Time Between Reductions is less than or equal to 72 hours.
- (b) the sum of the Demand Response Resource's Minimum Reduction Time plus the Minimum Time Between Reductions is less than or equal to 24 hours.

Each Supply Offer for a Net Supply Generator Asset associated with a Demand Response Resource made into the Day-Ahead Energy Market shall also meet one of the following requirements:

- (a) the sum of the Net Supply Generator Asset's Notification Time plus Start-Up Time plus Minimum Run Time plus Minimum Down Time is less than or equal to 72 hours.
- (b) the sum of the Net Supply Generator Asset's Minimum Run Time plus Minimum Down Time is less than or equal to 24 hours.

# III.13.6.1.5.2. Requirement that Offers Reflect Accurate Demand Response Capacity Resource Operating Characteristics.

For each day, Demand Reduction Offers and, if applicable, Supply Offers of associated Net Supply Generator Assets, submitted into the Day-Ahead Energy Market and Real-Time Energy Market for the portion of a resource having a Capacity Supply Obligation must reflect the then-known operating characteristics of the resource. Resources must re-declare to the ISO any changes to the offer parameters that occur in real time to reflect the operating characteristics of the resource. A resource failing to comply with this requirement shall be subject to economic penalties described in Appendix B, in addition to any applicable availability penalties pursuant to Section III.13.7.2.7.1.2.

#### III.13.6.1.5.3. Additional Requirements for Demand Resources.

Demand Resources shall comply with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals and the auditing and rating requirements as detailed in Section III.13.6.1.5.4 and the ISO New England Manuals. Demand Response Capacity Resources having a Capacity Supply Obligation are subject to the following additional requirements:

- (a) Operating Data collection requirements as detailed in the ISO New England Manuals and Market Rule 1;
- (b) outage requirements in accordance with the ISO New England Manuals and ISO New England Operating Procedures, provided, however, that the portion of a resource having no Capacity Supply Obligation is not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

## III.13.6.1.5.4. Demand Response Auditing.

Demand Resources shall be subject to ISO conducted audits for the purposes of:

- (a) Auditing Demand Reduction Values or determining the Audited Demand Reduction for a Demand Resource;
- (b) Verifying the Commercial Operation of a Demand Resource; and
- (c) Verifying the Demand Reduction Value or the Audited Demand Reduction of the Demand Resource when the ISO, based on objective criteria, has determined that the Demand Reduction Value or the Audited Demand Reduction of a Demand Resource may not be credible.

New Demand Response Asset Audits shall be performed pursuant to Section III.13.6.1.5.4.8.

# III.13.6.1.5.4.1. General Auditing Requirements for Demand Resources Excluding Demand Response Capacity Resources.

(a) Audits of a Demand Resource will be conducted by simultaneously evaluating the performance of each demand asset that is mapped to that Demand Resource.

- (b) The results of an audit shall be adjusted to reflect any changes in the composition of the Demand Resource resulting from the unmapping of a demand asset from the resource subsequent to the performance of the audit.
- (c) An audit of a Real-Time Emergency Generation Resource must be performed simultaneously with the audit of any Real-Time Demand Response Resources containing Real-Time Demand Response Assets that are located behind the same end-use customer meter as the Real-Time Emergency Generation Assets mapped to the Real-Time Emergency Generation Resource.
- (d) An audit is valid beginning with the month in which the audit is performed, and remains valid until the next audit is performed for a like season, which shall be no later than the end of the next like seasonal DR Auditing Period. Additional audits performed in a month shall not replace the results of the initial audit conducted in a month and are valid on the first of the subsequent month following the audit. Audit results shall not replace a Demand Reduction Value that is based on Demand Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours.
- (e) If one or more demand assets of a Demand Resource do not have audit results at the time the Demand Resource is audited and the audit was conducted in a summer DR Auditing Period or a winter DR Auditing Period, then the contribution of those demand assets toward the audit value of the Demand Resource shall be effective starting with the later of: (i) the start of the DR Auditing Period, or (ii) the 1<sup>st</sup> of the month prior to the month of the audit provided the demand asset was available for dispatch by the ISO in that prior month, and if the demand asset was not available for dispatch in that prior month, then the 1<sup>st</sup> of the month in which the demand asset was available for dispatch.

## III.13.6.1.5.4.2. General Auditing Requirements for Demand Response Capacity Resources.

- (a) Audits of Demand Response Resources associated with a Demand Response Capacity Resource will be conducted by simultaneously evaluating the performance of each Demand Response Asset and Net Supply Generator Asset that is mapped to each associated Demand Response Resource.
- (b) The results of an audit shall be adjusted to reflect any changes in the composition of the Demand Response Resource resulting from the unmapping of a Demand Response Asset and Net Supply

Generator Asset from the Demand Response Resource subsequent to the performance of the audit.

- (c) An audit of a Real-Time Emergency Generation Resource must be performed simultaneously with the audit of any Demand Response Resources containing Demand Response Assets that are located behind the same Retail Delivery Point as the Real-Time Emergency Generation Assets mapped to the Real-Time Emergency Generation Resource. When the output of the Real-Time Emergency Generation Asset is greater than the Demand Response Baseline, adjusted pursuant to Section 8B.5, of the Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the Net Supply is reduced by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset.
- (d) An audit is valid beginning with the date on which the audit is performed, and remains valid until the next audit is performed for a like season, which shall be no later than the end of the next like Seasonal DR Audit period. For the Capacity Commitment Period commencing on June 1, 2017, the audit results for Demand Response Resources comprised of Demand Response Assets and associated Net Supply Generator Assets that were associated with a Real-Time Demand Response Resource in the prior Capacity Commitment Period shall be the sum of the audit results for those assets in the prior like Seasonal DR Audit period. When using audit results from a period prior to June 1, 2017 for those former Real-Time Demand Response Assets, the Audited Full Reduction Time shall be 30 minutes.
- (e) If one or more Demand Response Assets of a Demand Response Resource or associated Net Supply Generator Assets do not have an Audited Demand Reduction at the time the Demand Response Resource is audited and the audit was conducted in a summer DR Auditing Period or a winter DR Auditing Period, then the contribution of those Demand Response Assets or associated Net Supply Generator Assets toward the Audited Demand Reduction of the Demand Response Resource shall be effective starting with the later of: (i) the start of the DR Auditing Period, or (ii) the 1<sup>st</sup> of the month prior to the month of the audit, provided the Demand Response Asset or associated Net Supply Generator Asset was available for dispatch by the ISO in that prior month, and if the Demand Response Asset or associated Net Supply Generator Asset was not available for dispatch in that prior month, then the 1<sup>st</sup> of the month in which the Demand Response Asset or associated Net Supply Generator Asset was available for dispatch.

#### **III.13.6.1.5.4.3. Seasonal DR Audits.**

A Seasonal DR Audit must be conducted for each Demand Resource during each seasonal DR Auditing Period.

#### III.13.6.1.5.4.3.1. Seasonal DR Audit Requirement.

A Market Participant shall submit each Demand Resource to an ISO initiated audit each season to verify the Demand Reduction Value or Audited Demand Reduction for the resource for one or more months of the season. The Seasonal DR Audit must be requested by the Market Participant for the Demand Resource within each Capacity Commitment Period in which the Demand Resource has a Capacity Supply Obligation. The summer DR Auditing Period begins on June 1 and ends on August 31. The winter DR Auditing Period begins on December 1 and ends on January 31. For all Demand Resources other than Demand Response Capacity Resources, audits performed during the summer DR Auditing Period will be used to establish the audit results for the months of June, July, and August, and audits performed during the winter DR Auditing Period will be used to establish the audit results for the months of December and January. For Demand Response Capacity Resources, audits performed during the summer DR Auditing Period will be used to establish the Audited Demand Reduction for the Demand Resource summer months of June, July, August, September, October, November, and the following April and May, and audits performed during the winter DR Auditing Period will be used to establish the Audited Demand Reduction for the Demand Resource winter months of December and the following January, February and March.

#### III.13.6.1.5.4.3.2. Failure to Request or Perform an Audit.

If by the 1<sup>st</sup> of August for the summer DR Auditing Period or by the 1<sup>st</sup> of January for the winter DR Auditing Period a Market Participant has not requested a Seasonal DR Audit for a Demand Resource, the Market Participant shall be deemed to have requested a Seasonal DR Audit on those respective dates. A Demand Resource that does not successfully perform a Seasonal DR Audit for a DR Auditing Period shall have the audit results of its mapped demand assets or Demand Response Assets set to zero.

# III.13.6.1.5.4.3.3. Use of Event Performance Data to Satisfy Audit Requirements for Certain Resources.

A Real-Time Demand Response Resource or Real-Time Emergency Generation Resource that has received a Dispatch Instruction in a season for 100% of its highest CSO for the current DR Auditing Period lasting at least one hour, not including the 30 minute notification time, may use the first 60 minute

period of the event after the 30 minute notification time to satisfy the Seasonal DR Audit requirement for the applicable DR Auditing Period, subject to the provisions of Section III.13.6.1.5.4.1(c). A Real-Time Demand Response Resource or Real-Time Emergency Generation Resource's audit value under this provision is based on the average load reduction or output demonstrated over the duration of the qualifying 60 minute period.

A Market Participant must request that an event be used to satisfy the Demand Resource's Seasonal DR Audit requirement or replace a currently effective audit result within seven days of the Operating Day on which the Dispatch Instruction for the Real-Time Demand Response Resource or Real-Time Emergency Generation Resource is received.

# III.13.6.1.5.4.3.3.1. Demand Response Capacity Resources.

A Demand Response Capacity Resource may elect to use performance associated with a Shortage Event as defined in Section III.13.7.1.1.1 or a time period when the ISO has declared a capacity deficiency pursuant to ISO New England Operating Procedure No. 4 that occurs during a DR Auditing Period in place of requesting a Seasonal DR Audit.

If a Demand Response Resource associated with a Demand Response Capacity Resource does not reduce demand for some portion of the event, the audit results of its Demand Response Assets and associated Net Supply Generator Assets shall be set to zero. Otherwise, the Demand Response Resources associated with a Demand Response Capacity Resource will be measured based upon their offered parameters per Section III.13.6.1.5.4.6(d), and the Audited Demand Reduction for each Demand Response Resource will be capped at the average Desired Dispatch Point (for the Demand Response Resource and its associated Net Supply Generator Assets) over the audit duration by proportionally reducing each associated Demand Response Asset's and Net Supply Generator Asset's audit results.

Within 7 calendar days of the event, the participant must inform the ISO that it wishes to use dispatch performance during the event to establish the resource's Audited Demand Reduction.

#### III.13.6.1.5.4.4. Demand Resource Commercial Operation Audit.

(a) A Market Participant with a Demand Resource that has one or more increments that have not demonstrated commercial operation prior to the commencement of a Capacity Commitment Period shall perform a Demand Resource Commercial Operation Audit. The results of the Demand Resource

Commercial Operation Audit shall be used to verify the commercial capacity of the Demand Resource and establish the Audited Demand Reduction of a Demand Resource.

- (b) Demand Resource Commercial Operation Audits not performed prior to the commencement of the Capacity Commitment Period must be requested in time for performance within the first month in which the Demand Resource has a Capacity Supply Obligation in the Capacity Commitment Period or the Commercial Operation Date, whichever is earlier. A Demand Resource that does not successfully perform a Demand Resource Commercial Operation Audit shall have the audit results of its mapped demand assets or Demand Response Assets set to zero.
- (c) A Demand Resource that fails to demonstrate through its Demand Resource Commercial Operation Audit a demand reduction in the amount of its Capacity Supply Obligation shall be subject to the provisions of Section III.13.1.9 and Section III.13.3.4.
- (d) A Demand Resource Commercial Operation Audit performed during a summer DR Auditing Period or winter DR Auditing Period may be used to satisfy the Seasonal DR Audit requirement for the same seasonal period. If a Demand Resource conducts a Demand Resource Commercial Operation Audit outside of a summer DR Auditing Period or winter DR Auditing Period, the Seasonal DR Audit requirement shall not be satisfied, however the results shall be used in the calculation of the summer Seasonal DR Audit value or winter Seasonal DR Audit value as follows:
  - A Demand Resource Commercial Operation Audit conducted in the months of September, October, November, April, or May shall be considered a summer Seasonal DR Audit;
  - (2) A Demand Resource Commercial Operation Audit conducted in February or March shall be considered a winter Seasonal DR Audit.

# III.13.6.1.5.4.5. Additional Audits.

The ISO may initiate an audit to verify the Demand Reduction Value or Audited Demand Reduction of a Demand Resource when an evaluation based on objective criteria indicates a Market Participant is claiming demand reductions in excess of the Demand Resource's actual capability. Such criteria include, but are not limited to:

(a) A pattern of submitting to the ISO a level of available interruption that is less than the resource's Demand Reduction Value or Audited Demand Reduction during the same time period;

- (b) Actual loads for the underlying assets of the resource that, when aggregated, are below the resource's Demand Reduction Value or Audited Demand Reduction; or
- (c) Failure to achieve the dispatched interruption.

The results of an additional audit shall replace the results of the last like Seasonal DR Audit or Demand Resource Commercial Operation Audit.

The ISO may perform additional audits for a Demand Resource to establish the audit results or Audited Demand Reduction and the performance of the installed measures of the demand asset or Demand Response Asset and associated Net Supply Generator Asset. This additional auditing may consist of two levels.

- (a) Level 1 Audit: the ISO will establish the audit results by conducting a review of records of the demand asset or Demand Response Asset and associated Net Supply Generator Asset to verify that the reported measures have been installed and are operational. The audit shall include, but is not limited to, reviewing project or program databases, invoices, installation reports, work orders, and field inspection reports. In addition, the audit may involve reviewing any independent inspections or evaluations conducted as part of program implementation and program evaluation.
- (b) Level 2 Audit: the ISO shall establish the audit results by initiating or conducting an on-site field audit to verify the installation and performance of measures in the demand asset or Demand Response Asset and associated Net Supply Generator Asset. Such an audit may include a random or select sample of facilities and measures.

A level 1 audit is not required to precede a level 2 audit. If the results of the audit indicate that the demand reduction capability of the Demand Resource is less than or greater than its Demand Reduction Value or Audited Demand Reduction in the same period, then the Demand Reduction Value or Audited Demand Reduction shall be adjusted to the value demonstrated through the audit.

# III.13.6.1.5.4.6. Audit Methodologies.

- (a) For On-Peak Demand Resources, audit results shall be established based on the Average Hourly Output or Average Hourly Load Reduction in the DR Auditing Period.
- (b) For Seasonal Peak Demand Resources, audit results shall be established based on Average Hourly Output or Average Hourly Load Reduction or their equivalent in the DR Auditing Period.
- (c) For Real-Time Demand Response Resources and Real-Time Emergency Generation Resources, audits will be conducted via a Dispatch Instruction sent by the ISO. Audit results for a Real-Time Demand Response Resource and Real-Time Emergency Generation Resource will be based on the sum of the average load reductions or average incremental output demonstrated during the audit by each demand asset mapped to the Demand Resource.
- For Demand Response Capacity Resources, audits will be conducted via a Dispatch Instruction (d) sent by the ISO. Audit results for a Demand Response Capacity Resource will be based on the sum of the average load reductions or average Net Supply demonstrated during the audit by each Demand Response Asset and associated Net Supply Generator Asset associated with the Demand Response Resource that is mapped to the Demand Response Capacity Resource using (i) each Demand Response Resource's Offered Full Reduction Time to establish the start of the audit period and (ii) the Minimum Reduction Time adjusted for ramping time as the audit duration. The Offered Full Reduction Time is the Demand Response Resource Notification Time plus the Demand Response Resource Start-Up Time plus ((the Maximum Reduction plus the sum of the Economic Maximum Limits of any associated available Net Supply Generator Assets minus the Minimum Reduction) divided by the Demand Response Resource Ramp Rate). For purposes of determing the Offered Full Reduction Time, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5, of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the Economic Maximum Limit of the Net Supply Generator Asset is reduced by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset.

# III.13.6.1.5.4.7. Requesting and Performing an Audit.

(a) Seasonal DR Audits and Demand Resource Commercial Operation Audits will be performed following the request of the Market Participant. Audits will be performed within 20 Business Days of the date requested by the Market Participant. The date and time of the audit will be unannounced. An audit

request may be denied by the ISO, and an audit may be rescheduled, if its performance will jeopardize the reliable operation of the electrical system.

(b) Seasonal DR Audits may be performed on different dates and at different times for Demand Response Resources associated with a Demand Response Capacity Resource if the Demand Response Resources have different offer parameters. In addition, the ISO will only schedule Demand Resource Commercial Operation Audits of a Demand Response Resource with Demand Response Assets that do not have an Audited Demand Reduction value.

New Demand Response Asset Audits will be performed following the request of the Market Participant. The request for a New Demand Response Asset Audit by the Market Participant shall be made during the last seven days of the month. The audit will be performed on Business Days during the month following the date of the request by the Market Participant. The date and time of the audit will be unannounced. An audit request may be denied by the ISO, and an audit may be rescheduled, if its performance will jeopardize the reliable operation of the electrical system.

#### III.13.6.1.5.4.8. New Demand Response Asset Audits

A Market Participant may request a New Demand Response Asset Audit for all New Demand Response Assets that are mapped to a Demand Resource. The results of a New Demand Response Asset Audit may be used:

- (a) In calculating the Seasonal DR Audit value for the Demand Resource to which the asset is mapped until the next Seasonal DR Audit for the full Demand Resource is conducted;
- (b) For determination regarding termination under Section III.13.3.4(c); and
- (c) In the monthly calculation of a Demand Resource's Demand Reduction Value pursuant to Section III.13.7.1.5.7 and Section III.13.7.1.5.8.

#### III.13.6.1.5.4.8.1. General Auditing Requirements for New Demand Response Assets.

(a) A New Demand Response Asset Audit will be conducted by simultaneously evaluating the performance of each New Demand Response Asset that is mapped to that Demand Resource.

(b) A New Demand Response Asset Audit is valid beginning with the month in which the audit is performed, and remains valid until the next Seasonal DR Audit is performed for a like season. Additional audits performed in a month shall not replace the results of the initial audit conducted in a month and are valid on the first of the month following the audit. Audit results shall not be used in the calculation of a Demand Reduction Value that is based on Demand Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours.

#### **III.13.6.1.5.5.** Reporting of Forecast Hourly Demand Reduction.

A Market Participant with Real-Time Demand Response Resources, or Real-Time Emergency Generation Resources shall, in accordance with the ISO New England Manuals and Operating Procedures, submit to the ISO a two-day forecast of each Demand Resource's Forecast Hourly Demand Reduction for each Operating Day. The Market Participant shall update its forecast, in accordance with the ISO New England Manuals and Operating Procedures, to reflect its estimate of each Demand Resource's Forecast Hourly Demand Reduction.

#### III.13.6.1.5.6. Reporting of Monthly Maximum Forecast Hourly Demand Reduction.

A Market Participant with Real-Time Demand Response Resources, or Real-Time Emergency Generation Resources shall, in accordance with the ISO New England Manuals and Operating Procedures, submit to the ISO each month a forecast of each resource's monthly maximum Forecast Hourly Demand Reduction for each of the next 12 months.

#### III.13.6.2. Resources without a Capacity Supply Obligation.

A resource that does not have any Capacity Supply Obligation shall comply with the requirements in this Section III.13.6.2, and shall not be subject to the requirements set forth in Section III.13.6.1 during the Capacity Commitment Period, or portion thereof, for which the resource has no Capacity Supply Obligation.

#### III.13.6.2.1. Generating Capacity Resources.

#### III.13.6.2.1.1. Energy Market Offer Requirements.

A Generating Capacity Resource having no Capacity Supply Obligation is not required to offer into the Day-Ahead Energy Market or Real-Time Energy Market.

#### III.13.6.2.1.1.1. Day-Ahead Energy Market Participation.

A Generating Capacity Resource having no Capacity Supply Obligation may submit an offer into the Day-Ahead Energy Market. If any portion of the offered energy clears in the Day-Ahead Energy Market, the entire Supply Offer, up to the Economic Maximum Limit offered into the Day-Ahead Energy Market, will be subject to all of the rules and requirements applicable to that market for the operating day, including the obligation to follow ISO dispatch instructions. Such a resource that clears shall be eligible for dispatch in the Real-Time Energy Market.

#### III.13.6.2.1.1.2. Real-Time Energy Market Participation.

A Generating Capacity Resource having no Capacity Supply Obligation that did not submit an offer into the Day-Ahead Energy Market or was offered into the Day-Ahead Energy Market and did not clear, must Self-Schedule in order to participate in the Real-Time Energy Market and shall be subject to all of the requirements associated therewith. Such a resource shall be eligible for dispatch in the Real-Time Energy Market.

## III.13.6.2.1.2. Additional Requirements for Generating Capacity Resources Having No Capacity Supply Obligation.

Generating Capacity Resources having no Capacity Supply Obligation are subject to the following additional requirements:

- (a) complying with the auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) complying with the Operating Data collection requirements detailed in the ISO New England Manuals; and
- (c) complying with outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals. Generating Capacity Resources having no Capacity Supply Obligation are not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

#### III.13.6.2.2. [Reserved.]

#### III.13.6.2.3. Intermittent Power Resources.

#### III.13.6.2.3.1. Energy Market Offer Requirements.

An Intermittent Power Resource having no Capacity Supply Obligation is not required to offer into the Day-Ahead Energy Market or Real-Time Energy Market.

#### III.13.6.2.3.2. Additional Requirements for Intermittent Power Resources.

Intermittent Power Resources are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals; and
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals.

## III.13.6.2.4. Intermittent Settlement Only Resources and Non-Intermittent Settlement Only Resources.

#### III.13.6.2.4.1. Energy Market Offer Requirements.

A Settlement Only Resource may not submit an offer into the Day-Ahead Energy Market or the Real-Time Energy Market.

#### III.13.6.2.4.2. Additional Requirements for Settlement Only Resources.

Settlement Only Resources are subject to the following additional requirements:

- (a) auditing and rating requirements as detailed in the ISO New England Manuals;
- (b) Operating Data collection requirements as detailed in the ISO New England Manuals;
- (c) such resources are not subject to outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals.

#### III.13.6.2.5. Demand Resources.

#### III.13.6.2.5.1. Energy Market Offer Requirements.

Real-Time Emergency Generation Resources, Seasonal Peak and On-Peak Demand Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Market. A Real-Time Demand Response Asset associated with a Real-Time Demand Response Resource may submit Demand

Reduction Offers on a Day-Ahead and Real-Time basis pursuant to Appendix E. A Demand Response Capacity Resource and associated Net Supply Generator Assets, without a Capacity Supply Obligation is not required to offer into the Day-Ahead Energy Market or Real-Time Energy Market.

For Demand Reduction Offers made into the Day-Ahead Energy Market and Real-Time Energy Market from such Demand Response Resources, the sum of the Demand Response Resource's Minimum Reduction Time plus the Minimum Time Between Reductions must also be less than or equal to 24 hours.

For Supply Offers made into the Day-Ahead Energy Market and Real-Time Energy Market from such Net Supply Generator Assets, the sum of the Minimum Run Time plus the Minimum Down Time must also be less than or equal to 24 hours.

#### III.13.6.2.5.1.1. Day-Ahead Energy Market Participation.

A Demand Response Resource not associated with a Demand Response Capacity Resource or a Demand Response Resource associated with a Demand Response Capacity Resource without a Capacity Supply Obligation, may submit a Demand Reduction Offer or, for any associated Net Supply Generator Asset, a Supply Offer, into the Day-Ahead Energy Market. If any portion of the Demand Reduction Offer or Supply Offer clears in the Day-Ahead Energy Market, the entire Demand Reduction Offer or Supply Offer, up to the Maximum Reduction or Economic Maximum Limit offered into the Day-Ahead Energy Market, will be subject to all of the rules and requirements applicable to that market for the Operating Day, including the obligation to follow Dispatch Instructions. Such a resource that clears shall be eligible for dispatch in the Real-Time Energy Market.

#### III.13.6.2.5.1.2. Real-Time Energy Market Participation.

A Demand Response Resource not associated with a Demand Response Capacity Resource or a Demand Response Resource associated with a Demand Response Capacity Resource without a Capacity Supply Obligation, that did not submit an offer into the Day-Ahead Energy Market or was offered into the Day-Ahead Energy Market and did not clear, may submit a Demand Reduction Offer or, for any associated Net Supply Generator Assets, a Supply Offer, in the Real-Time Energy Market and shall be subject to all of the requirements associated therewith. Such a resource shall be eligible for dispatch in the Real-Time Energy Market.

## III.13.6.2.5.2. Additional Requirements for Demand Response Capacity Resources Having No Capacity Supply Obligation.

Demand Response Capacity Resources without a Capacity Supply Obligation are subject to the following additional requirements:

- (a) complying with the auditing and rating requirements as detailed in Section III.13.6.1.5.4 and the ISO New England Manuals;
- (b) complying with the Operating Data collection requirements detailed in the ISO New England Manuals; and
- (c) complying with outage requirements as outlined in the ISO New England Operating Procedures and ISO New England Manuals. Demand Response Capacity Resources having no Capacity Supply Obligation are not subject to the forced re-scheduling provisions for outages in accordance with the ISO New England Manuals and ISO New England Operating Procedures.

#### III.13.6.3. Exporting Resources.

A resource that is exporting capacity not subject to a Capacity Supply Obligation to an external Control Area shall comply with this Section III.13.6.3 and the ISO New England Manuals. Intermittent Power Resources, Settlement Only Resources, and Demand Resources are not permitted to back a capacity export to an external Control Area. The portion of a resource without a Capacity Supply Obligation that will be used in Real-Time to support an External Transaction sale must comply with the energy market offer requirements of Section III.1.10.7.

#### III.13.6.4. ISO Requests for Energy.

The ISO may request that a Demand Response Capacity Resource or Generating Capacity Resource having capacity that is not subject to a Capacity Supply Obligation provide energy for reliability purposes in the Real-Time Energy Market, but such resource shall not be obligated under Section III.13 of this Tariff by such a request to provide energy from that capacity, and shall not be subject to any availability penalties under Section III.13 of this Tariff by such a request for failure to provide energy from that capacity that is not subject to a Capacity Supply Obligation. If such resource does provide energy from that capacity, the resource shall be paid based on its most recent offer and is eligible for NCPC.

#### III.13.6.4.1. Real-Time High Operating Limit.

For purposes of facilitating ISO requests for energy under Section III.13.6.4, a Market Participant must report an up-to-date Real-Time High Operating Limit value at all times for a Generating Capacity Resource.

#### III.13.7. Performance, Payments and Charges in the FCM.

During each month within each Capacity Commitment Period ("Obligation Month"), each resource that acquired or shed a Capacity Supply Obligation for that Capacity Commitment Period (or any portion thereof) will be subject to payments, charges, penalties and adjustments for such activity. In addition, all resources with a Capacity Supply Obligation as of the beginning of the Obligation Month shall have their performance measured throughout the month, based on the resource's availability during any Shortage Events in the Obligation Month.

In the event of a change in the Lead Market Participant for a resource that has a Capacity Supply Obligation, the Capacity Supply Obligation shall remain associated with the resource and the new Lead Market Participant for the resource shall be bound by all provisions of this Section III.13 arising from such Capacity Supply Obligation. The Lead Market Participant for the resource at the start of an Obligation Month shall be responsible for all payments and charges associated with that resource in that Obligation Month.

#### III.13.7.1. Performance Measures.

#### III.13.7.1.1. Generating Capacity Resources.

During each Capacity Commitment Period, each Generating Capacity Resource having a Capacity Supply Obligation for that Capacity Commitment Period (or any portion thereof) will have its performance measured during each Obligation Month based on the resource's availability during any Shortage Events during the month.

#### III.13.7.1.1.1. Definition of Shortage Events.

- (a) A Shortage Event is any period of thirty or more contiguous minutes of system-wide Reserve Constraint Penalty Factor activation, defined as being short of operating reserves.
- (b) In an import-constrained Capacity Zone, as determined pursuant to Section III.13.2.3.4, a Shortage Event shall also be any OP4 Action 6, OP4 Action 12, OP4 Action 13, or OP7 event, or their successor operating procedures, that is declared based on adequacy and not security, as defined in the ISO New England Manuals, with a duration of thirty or more contiguous minutes, and that is not also declared outside of the Capacity Zone.

- (c) An export-constrained Capacity Zone, as determined pursuant to Section III.13.2.3.4, shall be exempt from a Shortage Event if an OP4 Action 6, OP4 Action 11, OP4 Action 12, OP4 Action 13, or OP7 event has been declared for the Rest-of-Pool Capacity Zone but not for that export-constrained Capacity Zone.
- (d) In all cases, to be considered discrete Shortage Events, such events must be separated by at least 2.5 hours. Events that would satisfy the definition of Shortage Events except that they are separated by less than 2.5 hours shall be considered a single Shortage Event with a duration equal to the sum of the lengths of the underlying events. There shall be no more than two Shortage Events per Capacity Zone per day. If there are more than two Shortage Events in a day, only the first two Shortage Events that occur will be recognized.
- (e) For the purposes of Section III.13.7.1.1.1(d), Shortage Events that cross daily boundaries will be considered to occur on the day in which the Shortage Event was triggered. Availability during Shortage Events that cross monthly boundaries will be applied to the Obligation Month in which the Shortage Event was triggered.

#### III.13.7.1.1.1.A Shortage Event Availability Score.

For each Shortage Event, the ISO shall calculate a Shortage Event Availability Score for each resource, as follows: For each hour containing any portion of the Shortage Event, the ISO shall multiply the resource's hourly availability score by the number of minutes of the Shortage Event in that hour, and then divide the product by the total number of minutes in the Shortage Event. The resulting values for each hour shall then be added together to determine the resource's Shortage Event Availability Score.

#### III.13.7.1.1.2. Hourly Availability Scores.

The ISO shall calculate an availability score for each resource for each hour that contains any portion of a Shortage Event. A resource's availability score for an hour, expressed as a percentage which may not exceed 100 percent, shall be the sum of the resource's available MW in that hour plus any adjustments pursuant to Section III.13.7.1.1.4 divided by the resource's Capacity Supply Obligation. In the event that there are no Shortage Event hours during a month, no availability penalties will be assessed.

#### III.13.7.1.1.3. Hourly Available MW.

A resource's available MW in each hour that contains any portion of a Shortage Event shall be determined pursuant to the provisions of this Section III.13.7.1.1.3, provided, however, that in no case

shall a resource's available MW in an hour exceed that resource's CNR Capability (reduced by the hourly integrated delivered MW for any External Transaction sale or sales from that resource).

- (a) For a resource that is on-line with a metered output greater than zero and following ISO dispatch instructions, the available MW in an hour shall be the resource's Economic Maximum Limit, as submitted or redeclared by the Lead Market Participant.
- (b) For a resource that is off-line with a metered output equal to zero and available for dispatch and following ISO dispatch instructions and has a cold notification time plus cold start time of thirty minutes or less, the available MW in an hour shall be the resource's Economic Maximum Limit, as submitted or redeclared by the Lead Market Participant.
- (c) For a resource that is off-line with a metered output equal to zero and available for dispatch and following ISO dispatch instructions and has a cold notification plus cold start-up time of less than or equal to 12 hours (16 hours, during the first five Capacity Commitment Periods for resources with notification plus start-up times greater than 12 hours as of June 16, 2006) and the output, up to the Capacity Supply Obligation, was competitively offered into the Energy Market (i.e., capacity from the listed portion of the resource was offered at or below the appropriate Reference Level plus applicable conduct thresholds) but was not committed by the ISO and was consequently unavailable within 30 minutes, the available MW in an hour shall be the resource's Economic Maximum Limit, as submitted or redeclared by the Lead Market Participant.
- (d) For a resource that is off-line but not meeting the requirements of either Section III.13.7.1.1.3(b) or Section III.13.7.1.1.3(c), the available MW in an hour shall be zero.
- (e) For a resource that is on-line but not able to follow ISO dispatch instructions, the available MW in an hour shall be the resource's metered output for the hour.
- (f) Where a resource is not committed due to an outage or derate of transmission equipment within the New England Control Area, other than an outage or de-rate of transmission equipment that is controlled by the owner of the resource or that constitutes a radial lead to a resource in the New England Control Area (other than radial leads to Wyman 4 and Stony Brook), that resource's available MW in an hour shall not be reduced as result. Maine Independence Station shall be considered available when derated or not committed because of a transmission constraint.

- (g) Where a resource is denied a self-schedule request by the ISO and therefore was not available in the Real-Time Energy Market, that resource's available MW in an hour shall not be reduced as a result.
- (h) Where a New Generating Capacity Resource that has cleared in the Forward Capacity Auction has completed construction but due to a planned transmission facility (e.g., a radial interconnection) not being in service is not able to achieve Commercial Operation and cannot conduct its capability audit by the first day of the Obligation Month, that resource's available MW in an hour shall not be reduced as a result (i.e., the resource shall not be subject to an availability penalty as a result).
- (i) Where a New Generating Capacity Resource that has cleared in the Forward Capacity Auction has completed construction but due to a planned transmission facility (e.g., a radial interconnection) not being in service is not able to achieve Commercial Operation, and is able to conduct a capability audit, that resource's available MW in an hour shall not be reduced as a result (i.e., the resource shall not be subject to an availability penalty as a result).
- (j) Where a resource is associated with one or more External Transaction sales submitted in accordance with Section III.1.10.7(f), that resource will have its hourly available MW reduced by the hourly integrated delivered MW for the External Transaction sale or sales.

#### III.13.7.1.1.4. Availability Adjustments.

- (a) A resource's hourly availability score may be increased using a Supplemental Availability Bilateral as described in Section III.13.5.3. Where all of the requirements of Section III.13.5.3 are met, the amount of available MW from the Supplemented Capacity Resource during each hour of the Shortage Event will be increased by the amount of supplemental capacity specified in the Supplemental Availability Bilateral, provided, however, that only available capacity above the Supplemental Capacity Resource's Capacity Supply Obligation, if any, during each hour of the Shortage Event may be counted as supplemental capacity for the Supplemented Capacity Resource. The sum of these amounts will be counted in determining the availability score of the Supplemented Availability Resource for the Shortage Event.
- (b) A resource's hourly availability score may be increased when an asset associated with the resource is on a planned outage that was approved in the ISO's annual maintenance scheduling process.

Market Participants may indicate when submitting a planned outage request that the outage is to be considered exempt as described in ISO New England Operating Procedure No. 5. In such cases the associated resource's hourly available MWs may be increased by an amount up to the outage MWs requested, provided that the resource has not exceeded the maintenance allotment hour limit regarding exempt approved planned outages at the time of the Shortage Event as described in the ISO New England Manuals. In the case of a Settlement Only Resource, a planned outage scheduled in either December or January or during the period June 1 through September 15 may not be used to increase the resource's hourly availability score as described in this subsection.

#### III.13.7.1.1.5. Poorly Performing Resources.

Prior to the Forward Capacity Auction qualification process, the ISO shall determine whether a resource meets the following two criteria: in the most recent four consecutive Capacity Commitment Periods or the most recent 4 years in which the resource assumed a Capacity Supply Obligation: (a) the resource received 3 annual availability scores of less than or equal to 40 percent; and (b) the resource has failed to be available in its entirety during ten or more Shortage Events during that same period. The annual availability score for each Capacity Commitment Period shall be equal to the average of all availability scores as calculated for each hour during each Shortage Event. If both of these criteria are met, the resource shall be considered a Poorly Performing Resource and shall not be eligible to participate in any subsequent Forward Capacity Auctions, and may not assume an obligation through the reconfiguration auctions, or Capacity Supply Obligation Bilaterals until it either achieves an availability score of 60 percent or higher in three consecutive Capacity Commitment Periods or 3 consecutive years, or demonstrates to the ISO that the reasons for the inadequate availability scores have been remedied. For the purposes of determining whether a resource is a Poorly Performing Resource, its availability score while it is de-listed shall not be considered. For the purposes of returning from poorly performing status, the ISO, at the request of the resource owner, may consider performance while de-listed, but in no case shall the ISO use non-consecutive years for evaluating a resource's performance.

#### III.13.7.1.2. Import Capacity.

The performance of an Import Capacity Resource with a Capacity Supply Obligation will be measured during Shortage Events as defined in Section III.13.7.1.1.1. An Import Capacity Resource's Shortage Event Availability Score and hourly availability score shall be calculated in the manner described in Section III.13.7.1.1.1.A and III.13.7.1.1.2, respectively (with the hourly availability score adjusted pursuant to Section III.13.7.1.2.1, as appropriate). An Import Capacity Resource's available MW in each hour that contains any portion of a Shortage Event shall be determined as follows:

- (a) Where the corresponding External Transactions are delivering energy in accordance with ISO dispatch instructions, the resource's available MW in the hour shall be equal to the MW associated with the External Transactions, as submitted by the Market Participant.
- (b) Where the corresponding External Transactions have been offered in accordance with the provisions of Section III.13.6.1.2 and is not delivering energy during the hour because the ISO has not requested dispatch of the transaction, the resource's available MW in the hour shall be equal to the MW associated with the External Transactions, as submitted by the Market Participant.
- (c) Where the corresponding External Transactions have not been offered in accordance with the provisions of Section III.13.6.1.2 or have been offered in accordance with the provisions of Section III.13.6.1.2 and are not delivering energy during the hour despite ISO requested dispatch of the transaction, the resource's available MW in the hour shall be zero.
- (d) Where the Import Capacity Resource was offered in accordance with the provisions of Section III.13.6.1.2 but cannot make Real-Time deliveries of energy because the relevant external interface is already flowing at its Total Transfer Capability into New England in Real-Time, the resource's available MW in the hour shall be equal to the MW associated with the External Transactions, as submitted by the Market Participant.

#### III.13.7.1.2.1. Availability Adjustments.

The hourly availability score of an Import Capacity Resource that qualified as being backed by a single External Resource may be increased when the associated External Resource is on a planned outage in the same manner as described in Section III.13.7.1.1.4(b).

#### III.13.7.1.3. Intermittent Power Resources.

The performance measure for Intermittent Power Resources, including Intermittent Settlement Only Resources will be included in the determination of their summer and winter Qualified Capacity as described in Section III.13.1.1.2.2.6 and Section III.13.1.2.2.2.

#### III.13.7.1.4. Settlement Only Resources.

#### III.13.7.1.4.1. Non-Intermittent Settlement Only Resources.

A Non-Intermittent Settlement Only Resource's Shortage Event Availability Score and hourly availability score shall be calculated in the manner described in Section III.13.7.1.1.1.A and III.13.7.1.1.2, respectively. Its available MW in an hour of a Shortage Event shall be the resource's metered output for the hour.

#### III.13.7.1.4.2. Intermittent Settlement Only Resources.

The performance measure for Intermittent Settlement Only Resources will be included in the determination of their summer and winter Qualified Capacity as described in Section III.13.1.1.2.2.6 and Section III.13.1.2.2.2.

#### III.13.7.1.5. Demand Resources.

#### III.13.7.1.5.1. Capacity Values of Demand Resources.

The Capacity Value of a Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast as determined by the ISO for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, multiplied by one plus the percent average avoided peak transmission and distribution losses used by the ISO in its calculations of the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears. Beginning with the Capacity Commitment Period starting June 1, 2012 the Capacity Value of a Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by one plus the percent average avoided peak transmission and distribution losses used to calculate the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears. For the first Forward Capacity Auction, the value of the Installed Capacity Requirement divided by the 50/50 summer system peak load forecast shall be 1.143, and one plus the percent average avoided peak transmission and distribution losses shall be 1.08.

III.13.7.1.5.1.1. Special Provisions for Demand Resources that Cleared in the First through Seventh Forward Capacity Auctions in which Project Sponsor Elected to have its Capacity Supply Obligation and Capacity Clearing Price Apply for Multiple Capacity Commitment Periods.

For a Demand Resource that cleared in the Forward Capacity auction for the Capacity Commitment Period beginning June 1, 2010 in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period beginning June 1, 2010, the Capacity Value of that Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the product of 1.143 and 1.08. For a Demand Resource that cleared in the Forward Capacity Auction for the Capacity Commitment Period beginning June 1, 2011 in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period beginning June 1, 2011, the Capacity Value of that Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the product of 1.161 and 1.08. For a Demand Resource that cleared in the Forward Capacity Auction for any of the Capacity Commitment Periods beginning June 1, 2012 through the Capacity Commitment Period beginning in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply in a future Capacity Commitment Period, the Capacity Value of that Demand Resource for an Obligation Month shall be its Demand Reduction Value for the month as determined pursuant to Section III.13.7.1.5.3 multiplied by the product of 1.08. This special provision shall cease to apply once the period elected by the Project Sponsor to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its Demand Resource offer cleared has expired.

#### III.13.7.1.5.2. Capacity Values of Certain Distributed Generation.

For those Distributed Generation resource assets that are capable of generating energy in excess of the facility load and capable of delivering the excess generation to the power grid, if across Demand Resource On-Peak Hours, Demand Resource Seasonal Peak Hours, Real-Time Demand Response Event Hours, or Real-Time Emergency Generation Event Hours, as appropriate, a Distributed Generation resource asset's monthly average hourly output is greater than the monthly average hourly load of the end-use customer to which the resource is directly connected, the Capacity Value of the portion of output exceeding the customer's load for the month will be the Demand Reduction Value for that portion of the output. No average avoided peak transmission and distribution losses shall be applied to Net Supply associated with a Demand Response Asset, Demand Response Resource, or Demand Response Capacity Resource.

#### III.13.7.1.5.3. Demand Reduction Values.

A Demand Reduction Value is a quantity of reduced demand produced by a Demand Resource and is calculated pursuant to Section III.13.7.1.5.4, III.13.7.1.5.5, III.13.7.1.5.6, III.13.7.1.5.7 and III.13.7.1.5.8.

#### III.13.7.1.5.4. Calculation of Demand Reduction Values for On-Peak Demand Resources.

Monthly Demand Reduction Values shall be established for the months of June, July, August, December, and January and seasonal Demand Reduction Values for the remaining calendar months. The monthly Demand Reduction Value of On-Peak Demand Resources shall be equal to its Average Hourly Load Reduction or Average Hourly Output over Demand Resource On-Peak Hours in the month.

#### III.13.7.1.5.4.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value of On-Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of June, July and August. The summer seasonal Demand Reduction Value shall apply to the months of September, October, November, April and May.

#### III.13.7.1.5.4.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value of On-Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of December and January. The winter seasonal Demand Reduction Value shall apply to the months of February and March.

## III.13.7.1.5.5. Calculation of Demand Reduction Values for Seasonal Peak Demand Resources.

Monthly Demand Reduction Values shall be established for the months of June, July, August, December, and January and seasonal Demand Reduction Values for the remaining calendar months. The monthly Demand Reduction Value of Seasonal Peak Demand Resources shall be equal to its Average Hourly Load Reduction or Average Hourly Output over Demand Resource Seasonal Peak Hours in the month. If there are no Demand Resource Seasonal Peak Hours in the months of July, August, or January, the Demand Reduction Value for those months shall be equal to: (i) the Demand Reduction Value established for the previous month if the previous month's Demand Reduction Value was calculated using Seasonal Peak Hours or (ii) the Seasonal DR Audit results if the Demand Reduction Value for the previous month was not calculated using Seasonal Peak Hours. If there are no Demand Resource Seasonal Peak Hours in the months of June or December, the Demand Reduction Value of that resource for those months shall be equal to (i) the first applicable seasonal audit, if conducted in that month, or (ii) where there was no audit conducted in the month, the applicable previous seasonal Demand Reduction Value.

#### III.13.7.1.5.5.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value of Seasonal Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of June, July and August. This summer seasonal Demand Reduction Value will apply to the months of September, October, November, April and May.

#### III.13.7.1.5.5.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value of Seasonal Peak Demand Resources shall be equal to the simple average of its monthly Demand Reduction Values in the most recent months of December and January. This winter seasonal Demand Reduction Value will apply to the months of February and March.

III.13.7.1.5.6. [Reserved.]

III.13.7.1.5.6.1. [Reserved.]

III.13.7.1.5.6.2. [Reserved.]

(a)

#### III.13.7.1.5.7. Demand Reduction Values for Real-Time Demand Response Resources.

Demand Reduction Values are determined on a monthly basis. For the months of June, July, August, December, and January, the Demand Reduction Value of a Real-Time Demand Response Resource is the simple average of its Hourly Calculated Demand Resource Performance Values in the month.

If there are no Real-Time Demand Response Event Hours for a Real-Time Demand Response Resource in the months of July, August, or January, the Demand Reduction Value of that resource for those months shall be equal to (i) the Demand Reduction Value established for the previous month if the previous month's Demand Reduction Value was calculated using Real-Time Demand Response Event Hours or (ii) the sum of the audit values of the assets mapped to the Real-Time Demand Response Resource in that month if the Demand Reduction Value for the previous month was not calculated using Real-Time Demand Response Event Hours. If there are no Real-Time Demand Response Event Hours for a Real-Time Demand Response Resource in the months of June or December the Demand Reduction Value of that resource for those months shall be equal to (i) the first applicable seasonal audit, if conducted in that

month, or (ii) the sum of the audit values of the assets mapped to the Real-Time Demand Response Resource in that month.

#### III.13.7.1.5.7.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value of a Real-Time Demand Response Resource for September, October, November, April and May shall be equal to (i) the simple average of its Demand Reduction Values in the most recent months of June, July and August if there are no Real-Time Demand Response Event Hours in the month or (ii) the simple average of (a) the simple average of its Demand Reduction Values in the most recent months of June, July and August and (b) its Demand Reduction Value, established using the method specified in Section III.13.7.1.5.7, across the Real-Time Demand Response Event Hours in the month if there are Real-Time Demand Response Event Hours in the month.

#### III.13.7.1.5.7.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value of a Real-Time Demand Response Resource for February and March shall be equal to (i) the simple average of its Demand Reduction Values in the most recent months of December and January if there are no Real-Time Demand Response Event Hours in the month or (ii) the simple average of (a) the simple average of its Demand Reduction Value in the most recent months of December and January and (b) its Demand Reduction Value, established using the method specified in Section III.13.7.1.5.7, across the Real-Time Demand Response Event Hours in the month if there are Real-Time Demand Response Event Hours in the month.

## III.13.7.1.5.7.3. Determination of Hourly Calculated Demand Resource Performance Values for Real-Time Demand Response Resources.

The Hourly Calculated Demand Resource Performance Value shall be computed for each Real-Time Demand Response Resource receiving a Dispatch Instruction for a Real-Time Demand Response Event Hour. The Hourly Calculated Demand Resource Performance Value shall be computed as (i) the Real-Time Demand Response Resource's Capacity Supply Obligation, divided by (ii) the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast as determined by the ISO for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, divided by (iii) one plus the percent average avoided peak transmission and distribution losses used in the calculation of the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, and multiplied by (iv) one plus the quotient of Hourly Real-Time Demand Resource Deviation and

the amount of load reduction or output that the Market Participant with the resource was instructed to produce from that resource pursuant to Dispatch Instructions.

### III.13.7.1.5.7.3.1. Determination of the Hourly Real-Time Demand Response Resource Deviation.

An Hourly Real-Time Demand Response Resource Deviation shall be calculated for each Real-Time Demand Response Resource as the difference between the Average Hourly Load Reduction or Average Hourly Output of the Real-Time Demand Response Resource and the amount of load reduction or output that the Market Participant with the resource was instructed in the Dispatch Instruction to produce in the Real-Time Demand Response Event Hour. The calculation of the Hourly Real-Time Demand Response Resource Deviation shall be determined in a manner that reflects that Real-Time Demand Response Resources are allowed 30 minutes from the beginning of the first Real-Time Demand Response Event Hour in consecutive Real-Time Demand Response Event Hours in a Dispatch Instruction for the same Operating Day to achieve the load reduction amount indicated in the Dispatch Instruction when such resources are dispatched in response to Real-Time Demand Resource Dispatch Hours. The Total Negative Hourly Demand Resource Deviations for each hour shall be calculated as the absolute value of the sum of the negative Hourly Real-Time Demand Response Resource Deviations and negative Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. The Total Positive Hourly Demand Resource Deviations for each hour shall be calculated as the sum of the positive Hourly Real-Time Demand Response Resource Deviations and positive Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. If the Hourly Real-Time Demand Response Resource Deviation is greater than zero in any Real-Time Demand Response Event Hour, the Hourly Real-Time Demand Response Resource Deviation shall be multiplied by the lesser of: (i) one, or; (ii) the ratio of the Total Negative Hourly Demand Resource Deviations divided by the Total Positive Demand Resource Deviations in the same Load Zone in the hour or, starting on June 1, 2011, in the same Dispatch Zone in the hour.

#### III.13.7.1.5.8. Demand Reduction Values for Real-Time Emergency Generation Resources.

Demand Reduction Values shall be determined on a monthly basis. For the months of June, July, August, December, and January, the Demand Reduction Value of a Real-Time Emergency Generation Resource shall be the simple average of its Hourly Calculated Demand Resource Performance Values in the month.

If there are no Real-Time Emergency Generation Event Hours for a Real-Time Emergency Generation Resource in the months of July, August, or January, the Demand Reduction Value for those months shall be equal to (i) the Demand Reduction Value established for the previous month if the previous months Demand Reduction Value was calculated using Real-Time Emergency Generation Event Hours or (ii) the sum of the audit values of the assets mapped to the Real-Time Emergency Generation Resouce in that month if the Demand Reduction Value for the previous month was not calculated using Real-Time Emergency Generation Event Hours. If there are no Real-Time Emergency Generation Event Hours for a Real-Time Emergency Generation Resource in the months of June or December, the Demand Reduction Value of that resource for those months shall be equal to (i) the first applicable seasonal audit, if conducted in that month, or (ii) the sum of the audit values of the assets mapped to the Real-Time Emergency Generation Resource in that month.

#### III.13.7.1.5.8.1. Summer Seasonal Demand Reduction Value.

The summer seasonal Demand Reduction Value for the months of September, October, November, April and May shall be equal to the simple average of the Demand Reduction Values in the most recent months of June, July and August if there are no Real-Time Emergency Generation Event Hours in the month. If there are Real-Time Emergency Generation Event Hours in the months of September, October, November, April or May, the Demand Reduction Value shall be equal to the Demand Reduction Value, established using the method specified in Section III.13.7.1.5.8, during all the Real-Time Emergency Generation Event Hours in the month.

#### III.13.7.1.5.8.2. Winter Seasonal Demand Reduction Value.

The winter seasonal Demand Reduction Value for the months of February and March shall be equal to the simple average of the Demand Reduction Values in the most recent months of December and January if there are no Real-Time Emergency Generation Event Hours in the month. If there are Real-Time Emergency Generation Event Hours in the months of February or March, the Demand Reduction Value shall be equal to the Demand Reduction Value, established using the method specified in Section III.13.7.1.5.8 during all the Real-Time Emergency Generation Event Hours in the month.

## III.13.7.1.5.8.3. Determination of Hourly Calculated Demand Resource Performance Values for Real-Time Emergency Generation Resources.

The Hourly Calculated Demand Resource Performance Value shall be computed for each Real-Time Emergency Generation Resource receiving a Dispatch Instruction for a Real-Time Emergency Generation Event Hour. The Hourly Calculated Demand Resource Performance Value shall be computed as (i) the Real-Time Emergency Generation Resource's Capacity Supply Obligation, divided by (ii) the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, divided by (iii) one plus the percent average avoided peak transmission and distribution losses used in the calculation of the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, and multiplied by (iv) one plus the quotient of Hourly Real-Time Emergency Generation Resource Deviation and the amount of load reduction or output that the Market Participant with the resource was instructed to produce from that resource pursuant to Dispatch Instructions.

## III.13.7.1.5.8.3.1. Determination of the Hourly Real-Time Emergency Generation Resource Deviation.

An Hourly Real-Time Emergency Generation Resource Deviation shall be calculated for each Real-Time Emergency Generation Resource as the difference between the Average Hourly Output or Average Hourly Load Reduction of the Real-Time Emergency Generation Resource and the amount of output that the Market Participant with the resource was instructed in the Dispatch Instruction to produce in the Real-Time Emergency Generation Event Hour. The calculation of the Hourly Real-Time Emergency Generation Resource Deviation shall be determined in a manner that reflects that Real-Time Emergency Generation Resources are allowed 30 minutes from the beginning of the first Real-Time Emergency Generation Event Hour in consecutive Real-Time Emergency Generation Event Hours in a Dispatch Instruction for the same Operating Day to achieve the load reduction amount indicated in a Dispatch Instruction. The Total Negative Hourly Demand Resource Deviations for each hour shall be calculated as the absolute value of the sum of the negative Hourly Real-Time Demand Response Resource Deviations and negative Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. The Total Positive Hourly Demand Resource Deviations for each hour shall be calculated as the sum of the positive Hourly Real-Time Demand Response Resource Deviations and positive Hourly Real-Time Emergency Generation Deviations from all Real-Time Demand Response Resources and Real-Time Emergency

Generation Resources receiving Dispatch Instructions in the same hour in the same Load Zone or, starting on June 1, 2011, in the same Dispatch Zone. If the Hourly Real-Time Emergency Generation Resource Deviation is greater than zero in any Real-Time Emergency Generation Event Hour, the Hourly Real-Time Emergency Generation Resource Deviation shall be multiplied by the lesser of: (i) one, or; (ii) the ratio of the Total Negative Hourly Demand Resource Deviations divided by the Total Positive Demand Resource Deviations in the same Dispatch Zone in the hour.

# III.13.7.1.5.9. Determination of Hourly Calculated Demand Resource Performance Values for Real-Time Demand Response Resources and Real-Time Emergency Generation Resources Starting with the Capacity Commitment Period beginning June 1, 2012.

Starting with the Capacity Commitment Period beginning June 1, 2012, the divisor described in (ii) of Sections III.13.7.1.5.7.3 and III.13.7.1.5.8.3, which is equal to the summer Installed Capacity Requirement divided by the 50/50 summer system peak load forecast as determined by the ISO for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears, shall be eliminated from the determination of Hourly Calculated Demand Resource Performance Values, with the exception of Demand Resources that cleared in the Forward Capacity Auctions for the Capacity Commitment Periods beginning June 1, 2010 and June 1, 2011 in which the Project Sponsor elected to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its Demand Resource offer cleared. For Demand Resources with such multi-year Capacity Supply Obligations the divisor described in (ii) of Sections III.13.7.1.5.7.3 and III.13.7.1.5.8.3 shall continue to apply until the period elected by the Project Sponsor to have its Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its Demand Resource offer cleared has expired.

#### III.13.7.1.5.10. Demand Response Capacity Resources.

The performance of a Demand Response Capacity Resource with a Capacity Supply Obligation will be measured during Shortage Events as defined in Section III.13.7.1.1.1. A Demand Response Capacity Resource's Shortage Event Availability Score and hourly availability score shall be calculated in the manner described in Section III.13.7.1.1.1.A and III.13.7.1.1.2, respectively (with the hourly availability score adjusted pursuant to Section III.13.7.1.2.1). For the portion associated with the ability to reduce demand, availability for Demand Response Capacity Resources would be adjusted for average avoided peak transmission and distribution losses as described in Section III.13.7.1.5.1 and Section

III.13.7.1.5.1.1. For the portion associated with the ability to provide Net Supply, availability for Demand Response Capacity Resources would not be adjusted for average avoided peak transmission and distribution losses.

#### III.13.7.1.5.10.1 Hourly Available MW.

A Demand Response Capacity Resource's available MW in each hour that contains any portion of a Shortage Event shall be determined based upon the sum of its associated Demand Response Resources as follows, provided, that in no case shall a Demand Response Capacity Resource's available MW in an hour exceed that resource's Qualified Capacity from the Forward Capacity Auction for the current Capacity Commitment Period per Section III.13.1.4.1. For purposes of the following calculations, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5, of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, any Net Supply of a Net Supply Generator Asset located at the same Retail Delivery Point, hourly Desired Dispatch Point and Economic Maximum Limit of the Net Supply Generator Asset, shall be reducted by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset.

- (a) For a Demand Response Resource that reduces demand and is following Dispatch Instructions and for any associated Net Supply Generator Assets that are following Dispatch Instructions where the total Desired Dispatch Point for the Demand Response Resource and the associated Net Supply Generator Assets is less than (the Maximum Reduction plus the Economic Maximum Limit for any associated available Net Supply Generator Assets) and greater than or equal to the Minimum Reduction, the available MW in an hour shall be the greater of (the resource's Real-Time Demand Reduction Obligation plus the Net Supply for any associated available Net Supply Generator Assets) and the lesser of (the resource's Demand Response Baseline as adjusted pursuant to Section III.8B.5 plus the Economic Maximum Limit for any associated available Net Supply Generator Assets), the resource's Hourly Adjusted Audited Demand Reduction, or (the resource's Maximum Reduction as submitted or redeclared by the Lead Market Participant for the resource plus the Economic Maximum Limit for any associated available Net Supply Generator Assets as submitted or redeclared by the Lead Market Participant).
- (b) For a Demand Response Resource that reduces demand and is following Dispatch Instructions and for any associated Net Supply Generator Assets that are following Dispatch Instruction where the total Desired Dispatch Point for the Demand Response Resource and the associated Net Supply Generator Assets is equal to Maximum Reduction plus the Economic Maximum Limit for any associated available

Net Supply Generator Assets) or (Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets equals Minimum Reduction plus Economic Minimum Limit for any associated available Net Supply Generator Assets) or total Desired Dispatch Point for the Demand Response Resource and the associated Net Supply Generator Assets is less than the Minimum Reduction plus Economic Minimum Limit for any associated available Net Supply Generator Assets, the available MW in an hour shall be the resource's Real-Time Demand Reduction Obligation plus any associated Net Supply.

- (c) For a Demand Response Resource that has reduced demand or any associated Net Supply Generator Assets have been dispatch but are not responding to Dispatch Instructions where the Real-Time Demand Reduction Obligation plus any associated Net Supply is less than the total Desired Dispatch Point for the Demand Response Resource and the associated Net Supply Generator Assets, the available MW in an hour shall be the resource's Real-Time Demand Reduction Obligation plus any associated Net Supply for the hour.
- (d) For a Demand Response Resource that has reduced demand or any associated Net Supply Generator Assets that have been dispatch but are not responding to Dispatch Instructions where the Real-Time Demand Reduction Obligation is greater than the total Desired Dispatch Point for the Demand Response Resource and the associated Net Supply Generator Assets, the available MW in an hour shall be the lesser of the resource's Real-Time Demand Reduction Obligation plus any associated Net Supply and Hourly Adjusted Audited Demand Reduction for the hour.
- (e) For a Demand Response Resource that is not reducing demand, is available for dispatch and is able to respond to Dispatch Instructions, and has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) and an Audited Full Reduction Time (adjusted for the Maximum Reduction and Economic Maximum Limit for any associated available Net Supply Generator Assets) of thirty minutes or less, the available MW in an hour shall be the lesser of (the lesser of (the resource's Maximum Reduction, as submitted or redeclared by the Lead Market Participant, and Actual Load) plus the sum of the Economic Maximum Limits for any associated available Net Supply Generator Assets as submitted or redeclared by the Lead market Participant) or Hourly Adjusted Audited Demand Reduction.
- (f) For a Demand Response Resource that is not reducing demand, is available for dispatch and is able to respond to Dispatch Instructions, and has an Audited Full Reduction Time (adjusted for the Maximum Reduction and Economic Maximum Limit for any associated available Net Supply Generator

Assets as submitted or redeclared by the Lead Market Participant) or Offered Full Reduction Time (adjusted for the Audited Demand Reduction) greater than thirty minutes and less than or equal to 12 hours, the available MW shall be zero unless the duration of the Shortage Event exceeds the Audited Full Reduction Time (adjusted for the Maximum Reduction and Economic Maximum Limit for any associated available Net Supply Generator Assets) and Offered Full Reduction Time (adjusted for the Audited Demand Reduction), in which case the available MW in an hour shall be the lesser of (the resource's Maximum Reduction, as submitted or redeclared by the Lead Market Participant, the resource's Actual Load plus Economic Maximum Limits for any associated available Net Supply Generator Assets as submitted or redeclared by the Lead Market Participant or the resource's Hourly Adjusted Audited Demand Reduction time weighted to reflect the portion of the hour in which the Demand Response Resource Notification Time and Demand Response Resource Start-Up Time exceeded the Shortage Event duration.

(g) For a Demand Response Resource that (i) is not reducing demand, is available for dispatch and is able to respond to Dispatch Instructions, and has an Audited Full Reduction Time (adjusted for the Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets) or Offered Full Reduction Time (adjusted for the Audited Demand Reduction) greater than 12 hours or (ii) is unavailable to reduce demand, the available MW shall be zero.

#### III.13.7.1.5.10.1.1 Adjusted Audited Demand Reduction.

A Demand Response Resource's Adjusted Audited Demand Reduction shall be determined as follows. For purposes of these calculations, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5 of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the Economic Maximum Limit of the Net Supply Generator Asset at the same location shall be reduced by the difference between the Real-Time Emergency Generation Asset's output and the adjusted Demand Response Baseline of the Demand Response Asset:

(a) A Demand Response Resource that has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) equal to its Audited Full Reduction Time (adjusted for the Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets) shall have its Adjusted Audited Demand Reduction set equal to the resource's Audited Demand Reduction.

(b) A Demand Response Resource that has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) greater than its Audited Full Reduction Time (adjusted for the Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets) shall have its Adjusted Audited Demand Reduction calculated as:

((the Audited Full Reduction Time adjusted for the (Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets)) divided by (the Offered Full Reduction Time adjusted for the Audited Demand Reduction)) multiplied by the lesser of (the Audited Demand Reduction or (Maximum Reduction as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets)).

(c) A Demand Response Resource that has an Offered Full Reduction Time (adjusted for the Audited Demand Reduction) less than its Audited Full Reduction Time (adjusted for the Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets) shall have its Adjusted Audited Demand Reduction calculated as:

((the Offered Full Reduction Time adjusted for the Audited Demand Reduction) divided by (the Audited Full Reduction Time adjusted for the (Maximum Reduction plus Economic Maximum Limit for any associated available Net Supply Generator Assets))) multiplied by the lesser of (the Audited Demand Reduction or (Maximum Reduction as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets)).

#### III.13.7.1.5.10.1.2 Hourly Adjusted Audited Demand Reduction.

The Hourly Adjusted Audited Demand Reduction shall be calculated as the time weighted average of the Adjusted Audited Demand Reduction and Audited Demand Reduction for the period the resource was dispatched.

#### III.13.7.1.5.10.2 Availability Adjustments.

The hourly availability score of a Demand Response Capacity Resource shall be increased in the same manner as described in Section III.13.7.1.1.4(a). The hourly availability score of a Demand Response Capacity Resource comprised of an aggregation of one or more Demand Response Resources shall be adjusted as described in Section III.13.7.1.1.4(b). In the case of Demand Response Resources comprised of an aggregation of one or more Demand Response Assets with a demand reduction and any Net Supply

of less than 5 MW achieved by the asset in the most recent seasonal audit of the associated Demand Response Capacity Resource, a planned outage scheduled in either December or January or during the period June 1 through September 15 may not be used to increase the resource's hourly availability score as described in Section III.13.7.1.1.4(b).

In addition, the hourly availability score of a Demand Response Capacity Resource shall be increased as described in this subsection:

- (a) A Demand Response Capacity Resource's hourly availability score shall be increased, subject to verification by the ISO, when one or more Demand Response Assets of a Demand Response Resource associated with the Demand Response Capacity Resource is on a forced reduction or scheduled reduction.
  - (i) A forced reduction can be submitted to the ISO as described in the ISO New England Manuals for any reductions in demand that occur as a result of actions outside the control of the Demand Response Asset that is subject to the forced reduction. The forced reduction can be submitted or revised during the resettlement process and cannot exceed the demand reduction achieved by the Demand Response Asset in the most recent seasonal audit of the associated Demand Response Capacity Resource.
  - (ii) A scheduled reduction must be submitted to the ISO at least 15 days ahead of the start of the reduction to be eligible for an adjustment for any reductions in load that are the result of a scheduled plant shutdown or maintenance of energy consuming equipment. The scheduled reduction cannot exceed the demand reduction achieved by the Demand Response Asset in the most recent seasonal audit of the associated Demand Response Capacity Resource. Scheduled reductions must be a minimum of a single calendar day, and shall not exceed a total of 14 calendar days per Capacity Commitment Period.
- (b) The sum of the availability adjustments for an hour may not exceed:
  - (i) for a Demand Response Resource that has received a Dispatch Instruction to reduce its demand, the lesser of the resource's Demand Response Baseline as adjusted pursuant to Section III.8B.5 plus Economic Maximum Limit for any associated available Net Supply Generator Assets) and Audited Demand Reduction adjusted down by the greater of (the Maximum Reduction, as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets), or (Real-Time Demand

Reduction Obligation plus Net Supply for any associated Net Supply Generator Asets). For purposes of this calculation, when the output of a Real-Time Emergency Generation Asset at the same location exceeds the Demand Response Baseline, adjusted pursuant to Section III.8B.5, of a Demand Response Asset located at the same Retail Delivery Point, any Net Supply and the Economic Maximum Limit of the Net Supply Generator Asset at the same location shall be reduced by the difference between the Real-Time Emergency Generation Asset's output and adjusted Demand Response Baseline of the Demand Response Asset.

(ii) for a Demand Response Resource that as not received a Dispatch Instruction to reduce its demand, the lesser of the resource's Actual Load plus Economic Maximum Limit for any associated available Net Supply Generator Assets, as submitted or redeclared by the Lead Market Participant), and the Audited Demand Reduction adjusted down by (the Maximum Reduction, as submitted or redeclared by the Lead Market Participant plus Economic Maximum Limit for any associated available Net Supply Generator Assets, as submitted or redeclared by the Lead Market Participant).

#### III.13.7.1.6. Self-Supplied FCA Resources.

Self-Supplied FCA Resources are subject to the availability penalties and credits as defined by their resource type.

#### III.13.7.2. Payments and Charges to Resources.

Resources acquiring or shedding a Capacity Supply Obligation shall be subject to payments and charges in accordance with this Section III.13.7.2. Such resources will also be subject to adjustments as detailed in Section III.13.7.2.7.

#### III.13.7.2.1. Generating Capacity Resources.

#### III.13.7.2.1.1. Monthly Capacity Payments.

Each resource that has: (i) cleared in a Forward Capacity Auction, except for the portion of resources designated as Self-Supplied FCA Resources or for resources not commercial during an Obligation Month pursuant to Section III.13.7.1.1.3(h); (ii) cleared in a reconfiguration auction; or (iii) entered into a Capacity Supply Obligation Bilateral shall be entitled to a monthly payment (subject to the adjustments in Section III.13.7.2.7) or charge during the Capacity Commitment Period as follows:

- (a) Forward Capacity Auction. For a resource whose offer has cleared in a Forward Capacity Auction, the monthly capacity payment shall equal the product of its cleared capacity (or in the case described in Section III.13.7.1.1.3(i), the lesser of the resource's Capacity Supply Obligation or its audited amount) and the Capacity Clearing Price in the appropriate Capacity Zone in the New England Control Area as adjusted pursuant to Section III.13.2.7.3(b) and as adjusted by applicable indexing for resources with additional Capacity Commitment Period elections pursuant to Section III.13.1.1.2.2.4 in the manner described below (the "FCA Payment"). For a resource that has elected to have the Capacity Clearing Price and the Capacity Supply Obligation apply for more than one Capacity Commitment Period, payments associated with the Capacity Supply Obligation and Capacity Clearing Price (indexed using the Handy-Whitman Index of Public Utility Construction Costs in effect as of December 31 of the year preceding the Capacity Commitment Period) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to four additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only.
- (b) **Reconfiguration Auctions**. For a resource whose offer or bid has cleared in an annual or monthly reconfiguration auction, the monthly capacity payment or charge shall be equal to the product of its cleared capacity and the appropriate reconfiguration auction clearing price in the Capacity Zone in which the resource cleared.
- (c) Capacity Supply Obligation Bilaterals. For resources that have acquired or shed a Capacity Supply Obligation through a Capacity Supply Obligation Bilateral, the monthly capacity payment or charge shall be equal to the product of the Capacity Supply Obligation being assumed or shed and price associated with the Capacity Supply Obligation Bilateral.

#### III.13.7.2.2. Import Capacity.

Import Capacity Resources shall receive monthly capacity payments utilizing the same methodology as that used for Generating Capacity Resources set forth in Section III.13.7.2.1.

#### III.13.7.2.2.A. Export Capacity.

If there are any Export Bids or Administrative Export De-list Bids from resources located in an export-constrained Capacity Zone or in the Rest-of-Pool Capacity Zone that have cleared in the Forward Capacity Auction and if the resource is exporting capacity at an export interface that is connected to an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone that is different than the Capacity

Zone in which the resource is located, then charges and credits are applied as follows (for the following calculation, the Capacity Clearing Price will be the value prior to PER adjustments).

Charge Amount to Resource Exporting = [Capacity Clearing Price location of the interface - Capacity Clearing Price location of the resource ] x Cleared MWs of Export Bid or Administrative Export De-List Bid]

Credit Amount to Capacity Load Obligations in the Capacity Zone where the export interface is located= [Capacity Clearing Price location of the interface - Capacity Clearing Price location of the resource ] x Cleared MWs of Export Bid or Administrative Export De-list Bid]

Credits and charges to load in the applicable Capacity Zones, as set forth above, shall be allocated in proportion to each LSE's Capacity Load Obligation as calculated in Section III.13.7.3.1.

#### III.13.7.2.3. Intermittent Power Resources.

An Intermittent Power Resource shall be entitled to monthly payments during the Capacity Commitment Period calculated in the same manner as that used for Generating Capacity Resources as described in Section 13.7.2.1, except that any reduction in the Capacity Supply Obligation of an Intermittent Power Resource made pursuant to Section III.13.4.2.1.2.2.2.3 shall be at the same payment rate applicable to the reduced MW, such that there is a net zero payment for the reduced MW.

#### III.13.7.2.4. Settlement Only Resources.

#### III.13.7.2.4.1. Non-Intermittent Settlement Only Resources.

Non-Intermittent Settlement Only Resources shall be entitled to monthly payments during the Capacity Commitment Period calculated in the same manner as that used for Generating Capacity Resources as described in Section III.13.7.2.1.

#### III.13.7.2.4.2. Intermittent Settlement Only Resources.

Intermittent Settlement Only Resources shall be entitled to monthly payments during the Capacity Commitment Period calculated in the same manner as that used for Generating Capacity Resources as described in Section III.13.7.2.1, except that any reduction in the Capacity Supply Obligation of an Intermittent Settlement Only Resource made pursuant to Section III.13.4.2.1.2.2.2.3 shall be at the same payment rate applicable to the reduced MW, such that there is a net zero payment for the reduced MW.

#### III.13.7.2.5. Demand Resources.

## III.13.7.2.5.1. Monthly Capacity Payments for All Resources Except Real-Time Emergency Generation Resources.

For all Demand Resources except for Real-Time Emergency Generation Resources, the monthly payment shall be calculated in the same manner as for Generating Capacity Resources as described in Section III.13.7.2.1.1.

## III.13.7.2.5.2. Monthly Capacity Payments for Real-Time Emergency Generation Resources.

For Real-Time Emergency Generation Resources, monthly payments shall be calculated in the same manner as for Generating Capacity Resources as described in Section III.13.7.2.1.1, except that such payments may also be adjusted as described in Section III.13.2.3.3(f).

#### III.13.7.2.5.3. Energy Settlement for Real-Time Demand Response Resources

A Market Participant with Real-Time Demand Response Assets associated with a Real-Time Demand Response Resource that is dispatched or audited pursuant to Section III.13 shall be paid or charged for demand reductions, adjusted for net supply as described in Section III.E1.8.3 and for the percent average avoided peak distribution losses, at the Real-Time LMP for the Load Zone in which the Real-Time Demand Response Resource is located. The demand reduction paid or charged shall be net of the Real-Time Demand Reduction Obligation of Real-Time Demand Response Assets that are part of the Real-Time Demand Response Resource that received payment pursuant to Sections III.E1.9.2.1 or III.E1.9.2.2 for the same dispatch or audit period. Demand reductions eligible for payments or charges pursuant to this section shall be those produced during Real-Time Demand Response Event Hours or, in the case of an audit, for the period during which the ISO has requested the resource to audit.

#### III.13.7.2.5.4. Energy Settlement for Real-Time Emergency Generation Resources

A Market Participant with Real-Time Emergency Generation Assets associated with a Real-Time Emergency Generation Resource that is dispatched or audited pursuant to Section III.13 shall be paid or charged for demand reductions or generator output, adjusted as described in Section III.E1.8.3 or III.13.7.2.5.4.1 and for the percent average avoided peak distribution losses for the portion of the asset reducing demand, at the Real-Time LMP for the Load Zone in which the Real-Time Emergency Generation Resource is located for Capacity Commitment Periods commencing prior to June 1, 2017, and

at the Real-Time LMP for the Dispatch Zone in which the Real-Time Emergency Generation Resource is located for Capacity Commitment Periods commencing on or after June 1, 2017. Demand reductions or generator output eligible for payments or charges pursuant to this section shall be those produced during Real-Time Emergency Generation Event Hours or, in the case of an audit, for the period during which the ISO has requested the resource to audit.

#### III.13.7.2.5.4.1 Adjustment for Net Supply Generator Assets

For Capacity Commitment Periods commencing on or after June 1, 2017, when the output of a Real-Time Emergency Generation Asset exceeds the Demand Response Baseline, adjusted pursuant to Section 8B.5, of a Demand Response Asset located at the same Retail Delivery Point and Net Supply is produced, the output eligible for payments will be set equal the adjusted Demand Response Baseline of the Demand Response Asset.

#### III.13.7.2.6. Self-Supplied FCA Resources.

Self-Supplied FCA Resources shall not receive monthly capacity payments for the portion of the resource designated as a Self-Supplied FCA Resource. Charges to load associated with Self-Supplied FCA Resources are calculated pursuant to Section III.13.7.3.

#### III.13.7.2.7. Adjustments to Monthly Capacity Payments.

Monthly capacity payments to resources with a Capacity Supply Obligation as of the beginning of the Obligation Month will be adjusted as described in Section III.13.7.2.7.1.

## III.13.7.2.7.1. Adjustments to Monthly Capacity Payments of Generating Capacity Resources.

#### III.13.7.2.7.1.1. Peak Energy Rents.

Payments to New Generating Capacity Resources and Existing Generating Capacity Resources with Capacity Supply Obligations, except for resources not commercial as described in Section III.13.7.1.1.3(h) or Section III.13.7.1.1.3(i), shall be decreased by Peak Energy Rents ("PER") calculated in each Capacity Zone, as determined pursuant to Section III.13.2.3.4 in the Forward Capacity Auction, as provided below. The PER calculation shall utilize hourly integrated Real-Time LMPs. For each Capacity Zone in the Forward Capacity Auction, as determined pursuant to Section III.13.2.3.4, PER shall be computed based on the load-weighted Real-Time LMPs for each Capacity Zone, using the Real-Time Hub Price for the Rest-of-Pool Capacity Zone.

#### **III.13.7.2.7.1.1.1.** Hourly PER Calculations.

(a) For hours with a positive difference between the hourly Real-Time energy price and a strike price, the ISO shall compute PER for each hour ("Hourly PER") equal to this positive difference in accordance with the following formula, which includes scaling adjustments for system load and availability:

Hourly PER(\$/kW) = [(LMP - Strike Price) \* [Scaling Factor] \* [Availability Factor] Where:

Strike Price = the heat rate x fuel cost of the PER Proxy Unit described below.

Scaling Factor = the ratio of actual hourly integrated system load (calculated as the sum of Real-Time Load Obligations for the system as calculated in the settlement of the Real-Time Energy Market and adjusted for losses and including imports delivered in the Real-Time Energy Market) and the 50/50 predicted peak system load reduced appropriately for Demand Resources, used in the most recent calculation of the Installed Capacity Requirement for that Capacity Commitment Period, capped at an hourly ratio of 1.0.

Availability Factor = 0.95

- (b) PER Proxy Unit characteristics shall be as follows:
  - (i) The PER Proxy Unit shall be indexed to the marginal fuel, which shall be the higher of ultra low-sulfur No. 2 oil measured at New York Harbor plus a seven percent markup for transportation or day-ahead gas measured at the Algonquin City Gate, as determined on a daily basis;
  - (ii) The PER Proxy Unit shall be assumed to have no start-up, ramp rate or minimum run time constraints;
  - (iii) The PER Proxy Unit shall have a 22,000 Btu/kWh heat rate. This assumption shall be periodically reviewed after the first Capacity Commitment Period by the ISO to ensure that the heat rate continues to reflect a level slightly higher than the marginal generating unit in the region

that would be dispatched as the system enters a scarcity condition. Any changes to the heat rate of the PER Proxy Unit shall be considered in the stakeholder process in consultation with the state utility regulatory agencies, shall be filed pursuant to Section 205 of the Federal Power Act, and shall be applied prospectively to the settlement of future Forward Capacity Auctions.

#### III.13.7.2.7.1.1.2. Monthly PER Application.

(a) The Hourly PER shall be summed for each calendar month to determine the total PER for that month ("Monthly PER"). The ISO shall then calculate the Average Monthly PER earned by the proxy unit. The Average Monthly PER shall be equal to the average of the Monthly PER values for the 12 months prior to the Obligation Month. The PER deduction for each resource shall be calculated as follows:

PER Adjustment = the minimum of: (i) the PER cap or (ii) the Average Monthly PER x PER Capacity Supply Obligation.

Where the PER cap for each resource equals the FCA Payment, plus the product of the net value of any other Capacity Supply Obligations assumed or shed after the Forward Capacity Auction for the same Capacity Commitment Period multiplied by the Capacity Clearing Price applicable to that resource's location from that Forward Capacity Auction. Where the calculation results in a PER cap value less than zero, the PER cap will be revised to zero.

Where the PER Capacity Supply Obligation is equal to the minimum of the Capacity Supply Obligation or the Capacity Supply Obligation less any Capacity Supply Obligation MW from any portion of a Self-Supplied FCA Resource. However, if the Capacity Supply Obligation less any Capacity Supply Obligation from any portion of a Self-Supplied FCA Resource is less than zero, it will be zero for purposes of comparing it to the Capacity Supply Obligation in the PER Capacity Supply Obligation calculation.

- (b) PER shall be deducted from capacity payments independently of availability penalties.
- (c) FCA Payment minus PER may not be negative for any month.

#### III.13.7.2.7.1.2. Availability Penalties.

Availability penalties shall be assessed for each resource with a Capacity Supply Obligation as of the beginning of the Obligation Month. The penalty will be based on the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b) or as described in Section III.13.2.8) in the Capacity Zone in which the resource is located for the relevant Capacity Commitment Period, regardless of whether the resource assumed the Capacity Supply Obligation through a Forward Capacity Auction, a reconfiguration auction, or a Capacity Supply Obligation Bilateral.

For capacity resources that are partially or fully unavailable during a Shortage Event:

- (a) Penalties shall be determined and assessed on a resource-specific basis. Penalties shall be calculated for each Shortage Event during an Obligation Month and assessed on a monthly basis, subject to the availability penalty caps outlined in Section III.13.7.2.7.1.3.
- (b) The penalty per resource for each Shortage Event shall be equal to:

  Penalty = [Resource's Annualized FCA Payment]\*PF\*[1 Shortage Event Availability Score]

Where:

Annualized FCA Payment = the relevant Capacity Clearing Price, or in the case of Inadequate Supply or Insufficient Competition, the payment as described in Section III.13.2.8, (as adjusted pursuant to Section III.13.2.7.3(b)) multiplied by the resource's Capacity Supply Obligation as of the beginning of the Obligation Month multiplied by 12.

PF = .05 for Shortage Events of 5 hours or less. PF is increased by .01 for each additional hour above 5 hours.

#### III.13.7.2.7.1.3. Availability Penalty Caps.

The following caps will apply to the total availability penalties assessed to a resource. If a resource with a Capacity Supply Obligation sheds or acquires an obligation outside the relevant Obligation Month, the Annualized FCA Payment shall not be prorated. Caps are resource-specific and partial year assumption or transfer of a Capacity Supply Obligation through Capacity Supply Obligation Bilaterals or reconfiguration auctions does not affect the application of the cap to each resource independently.

- (a) **Per Day**. In no case shall the total penalties for all Shortage Events in an Operating Day exceed 10 percent of a resource's Annualized FCA Payment for that Capacity Commitment Period.
- (b) **Per Month**. The sum of a resource's penalties arising from unavailability during an Obligation Month may not exceed two and one-half times the Annualized FCA Payment, divided by twelve, for that Obligation Month. The sum of a resource's penalties arising from unavailability due to a single outage of four days or less but spanning two calendar months may not exceed two and one-half times the average of the Annualized FCA Payments, divided by twelve, for both months.
- (c) **Per Capacity Commitment Period**. In determining the availability penalties for the Obligation Month, a resource's cumulative availability penalties for a Capacity Commitment Period may not exceed its Annualized FCA Payment (less PER adjustments) for that Capacity Commitment Period.

## III.13.7.2.7.1.4. Availability Credits for Capacity Demand Response Capacity Resources, Generating Capacity Resources, Import Capacity Resources and SelfSupplied FCA Resources.

On a monthly basis, penalties received from unavailable resources shall be redistributed to Demand Response Capacity Resources, Generating Capacity Resources and Import Capacity Resources with Capacity Supply Obligations and to designated Supplemental Capacity Resources without a Capacity Supply Obligation that have a valid Supplemental Availability Bilateral (pursuant to Section III.13.5.3.2) that were available (pursuant to Section III.13.7.1.1.3, Section III.13.7.1.5.10.1) in the respective hours on a Capacity Zone basis as follows: For each Obligation Month, the penalties assessed for the Shortage Events during the month will be credited to those resources identified above that were available, in whole or in part, during the Shortage Events, pro-rata by hourly available MW in the relevant Capacity Zones. Self-Supplied FCA Resources shall be eligible to receive their pro rata share of availability penalties paid by other capacity resources.

#### III.13.7.2.7.2. Import Capacity.

In addition to the adjustment in this section, Import Capacity Resources shall also be subject to the same adjustments as Generating Capacity Resources as described in Section III.13.7.2.7.1.

#### III.13.7.2.7.2.1. External Transaction Offer and Delivery Performance Adjustments.

In the event that the conditions in Section III.13.6.1.2.1 are not met in any hour of an Operating Day, the Import Capacity Resource will be subject to the following:

- (a) If in any hour of an Operating Day a priced External Transaction associated with an Import Capacity Resource with a Capacity Supply Obligation is offered above both the offer threshold for the Operating Day and the offer threshold of the prior Operating Day, and for any priced External Transactions from the New York Control Area also is offered above the corresponding hourly day-ahead energy price (NYISO Location-Based Marginal Price) at the source interface, the Market Participant with the Import Capacity Resource will pay a penalty equal to the product of the Import Capacity Resource's Capacity Supply Obligation and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of days in the month.
- (b) For every hour of an Operating Day that the total amount offered from all External Transactions associated with an Import Capacity Resource is less than the Import Capacity Resource's Capacity Supply Obligation, the Market Participant with the Import Capacity Resource will pay a penalty equal to the product of the difference between the Capacity Supply Obligation and the total amount of energy offered for that hour and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of hours in the month. For each Operating Day only the greater of the total penalties in either the Day-Ahead Energy Market or Real-Time Energy Market will be assessed. For the purposes of this section the total energy offered will be adjusted in accordance with Section III.13.7.1.1.4(b) for any amount that was unavailable due to an outage approved in the ISO's annual maintenance scheduling process.
- (c) Except as specified in Section III.13.7.2.7.2.2, for every hour the total energy from an External Transaction associated with an Import Capacity Resource delivered in real-time to the New England Control Area is less than the energy requested, the Market Participant with the Import Capacity Resource will pay a penalty equal to the product of the difference between the quantity requested and the quantity delivered and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of hours in the month.

Any External Transaction associated with an Import Capacity Resource that is determined to be in economic merit during the next-hour scheduling process will be considered a requested transaction and the ISO may request all or a portion of each transaction.

A Market Participant's total penalty amount for a single Operating Day for each Import Capacity Resource shall be no more than the product of the Import Capacity Resource's Capacity Supply Obligation and the corresponding interface Capacity Clearing Price as adjusted in Section III.13.2.7.3(b), divided by the number of days in the month.

Each Obligation Month the penalty amounts from all Market Participants with Import Capacity Resources will be allocated to all Market Participants based on their pro-rata share of Capacity Load Obligation within each Capacity Zone in the Obligation Month, with each Capacity Zone allocated an amount based on the pro-rata share of total capacity credits within each Capacity Zone.

# **III.13.7.2.7.2.2.** Exceptions.

- a) No penalty will be assessed if the applicable external interface is fully loaded and the energy from an External Transaction that would otherwise be requested cannot flow. If the transfer capability of the applicable external interface is zero in the import direction it will be considered fully loaded for the purpose of this section.
- b) No penalty will be assessed if the delivered energy from a priced External Transaction associated with the New York Control Area is less than requested when the Real-Time Energy Market price at the source location (NYISO Location-Based Marginal Price) is higher than the Real-Time LMP at the associated External Node, provided that Operating Procedure No. 4 has not been declared due to a system-wide capacity deficiency.
- c) No penalty will be assessed during periods when the ISO has taken action to reduce import transactions due to a Minimum Generation Emergency condition or due to ramping constraints.
- d) No penalty will be assessed on the affected external interface during periods when minimumflow or directional-flow constraints have occurred, when the ISO was unable to utilize the automated check-out processes for the external interface, or when in-hour curtailments have occurred.

#### III.13.7.2.7.3. Intermittent Power Resources.

Monthly capacity payments to Intermittent Power Resources are subject to PER adjustments but are not subject to any additional availability penalties.

# III.13.7.2.7.4. Settlement Only Resources.

#### III.13.7.2.7.4.1. Non-Intermittent Settlement Only Resources.

Non-Intermittent Settlement Only Resources are subject to the same PER adjustments and availability penalties as Generating Capacity Resources as described in Section III.13.7.2.7.1.

#### III.13.7.2.7.4.2. Intermittent Settlement Only Resources.

Monthly capacity payments to Intermittent Power Resources are subject to PER adjustments but are not subject to any additional availability penalties.

#### III.13.7.2.7.5. Demand Resources.

Demand Response Capacity Resources shall be subject to the same adjustments as Generating Capacity Resources as described in Section III.13.7.2.7.1.

#### III.13.7.2.7.5.1. Calculation of Monthly Capacity Variances.

For each month, the Monthly Capacity Variance of a Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource shall be calculated by subtracting the Demand Resource's Capacity Supply Obligation for the month from the Demand Resource's monthly Capacity Value. If a Demand Resource's Monthly Capacity Variance is zero, the Demand Resource will not be subject to Demand Resource Performance Penalties or Demand Resource Performance Incentives.

#### III.13.7.2.7.5.2. Negative Monthly Capacity Variances.

With the exception of a Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that offer cleared, if a Demand Resource's Monthly Capacity Variance is a negative value, the Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource shall be subject to a Demand Resource Performance Penalty equal to the absolute value of the Monthly Capacity Variance multiplied by the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) in the Forward Capacity Auction for the relevant Capacity Commitment Period or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section III.13.2.3.3(f). If a Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that

offer cleared has a Monthly Capacity Variance with a negative value, the Demand Resource Performance Penalty for such a Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource shall be set according to the Capacity Clearing Price applicable to the Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource (as adjusted pursuant to Section III.13.2.7.3(b)), indexed using the Handy-Whitman Index of Public Utility Construction Costs in effect as of December 31, of the year preceding the Capacity Commitment Period or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section III.13.2.3.3(f), indexed using the Handy-Whitman Index of Public Utility Construction Costs, applicable to the Demand Resource for the particular Capacity Commitment Period.

#### III.13.7.2.7.5.3. Positive Monthly Capacity Variances.

With the exception of a Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that offer cleared, if a Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource's Monthly Capacity Variance is a positive value, then the Demand Resource shall be eligible to receive a Demand Resource Performance Incentive based on the Monthly Capacity Variance multiplied by the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) in the Forward Capacity Auction for the relevant Capacity Commitment Period, or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section III.13.2.3.3(f), provided that the sum of the Demand Resource Performance Penalties in the month in the Capacity Zone where the Demand Resource or Real-Time Emergency Generation Resource is located is equal to or greater than the sum of the Demand Resource Performance Incentives in the same month in that Capacity Zone. If a Demand Resource that has elected to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that cleared in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which that offer cleared has a Monthly Capacity Variance with a positive value, then the Demand Resource Performance Incentive for such a Demand Resource shall be set according to the Capacity Clearing Price applicable to the Demand Resource for the particular Capacity Commitment Period (as adjusted pursuant to Section III.13.2.7.3(b)), indexed using the Handy-Whitman Index of Public Utility Construction Costs

or in the case of a Real-Time Emergency Generation Resource, multiplied by the Capacity Clearing Price in the Forward Capacity Auction for the relevant Capacity Commitment Period as described in Section III.13.2.3.3(f), indexed using the Handy-Whitman Index of Public Utility Construction Costs, applicable to the Real-Time Emergency Generation, Real-Time Demand Response, On-Peak and Seasonal Peak Demand Resource for the particulate Capacity Commitment Period in effect as of December 31 of the year preceding the Capacity Commitment Period, provided that the sum of the Demand Resource Performance Penalties in the month in the Capacity Zone where the Demand Resource or Real-Time Emergency Generation Resource is located is equal to or greater than the sum of the Demand Resource Performance Incentives in the same month in that Capacity Zone.

# III.13.7.2.7.5.4. Determination of Net Demand Resource Performance Penalties and Demand Resource Performance Incentives.

Demand Resource Performance Penalties and Demand Resource Performance Incentives shall be determined for each Capacity Zone as follows: if the sum of the Demand Resource Performance Penalties in a month in a Capacity Zone is less than the sum of the Demand Resource Performance Incentives in the same month in that Capacity Zone, then the total amount of Demand Resource Performance Penalties shall be paid on a pro-rata basis, based on the non-prorated Demand Resource Performance Incentives of each Demand Resource with a positive Monthly Capacity Variance. The total amount of the Demand Resource Performance Incentives in a month in a Capacity Zone cannot exceed the total amount of the Demand Resource Performance Penalties in the same month in that Capacity Zone.

The total of the Demand Resource Performance Incentives in a month in a Capacity Zone cannot exceed the total of the Demand Resource Performance Penalties in the same month in that Capacity Zone. If the total Demand Resource Performance Penalties in a month in a Capacity Zone exceeds the total Demand Resource Performance Incentives in the same month in that Capacity Zone, the difference shall not be collected from load serving entities in that Capacity Zone (the ultimate purchaser of capacity).

# III.13.7.2.7.6. Self-Supplied FCA Resources.

Self-Supplied FCA Resources shall not be subject to a PER adjustment on the portion of the resource that is self-supplied, but shall be subject to the availability penalties and caps applicable to their resource types.

#### III.13.7.3. Charges to Market Participants with Capacity Load Obligations.

A load serving entity with a Capacity Load Obligation as of the end of the Obligation Month shall be subject to a charge equal to the product of: (a) its Capacity Load Obligation in the Capacity Zone; and (b) the applicable Net Regional Clearing Price. The Net Regional Clearing Price is defined as the sum of the total payments as defined in Section III.13.7.2 paid to resources with Capacity Supply Obligations in the Capacity Zone (excluding any capacity payments and charges made for Capacity Supply Obligation Bilaterals), less PER adjustments for resources in the zone as defined in Section 13.7.2.7.1.1, adjusted for any Demand Resource Performance Penalties in excess of Demand Resource Performance Incentives as described in Section III.13.7.2.7.5.4, and including any applicable export charges or credits as determined pursuant to Section III.13.7.2.2.A divided by the sum of all Capacity Supply Obligations (excluding (i) the quantity of capacity subject to Capacity Supply Obligation Bilaterals and (ii) the quantity of capacity clearing as Self-Supplied FCA Resources) assumed by resources in the zone. A load serving entity satisfying its Capacity Load Obligation by a Self-Supplied FCA Resource shall not receive a credit for any PER payment for its Capacity Load Obligation so satisfied.

#### III.13.7.3.1. Calculation of Capacity Requirement and Capacity Load Obligation.

The ISO shall assign each load serving entity a Capacity Requirement prior to the commencement of each Obligation Month for each Capacity Zone established in the Forward Capacity Auction pursuant to Section III.13.2.3.4. The Capacity Requirement for each month and Capacity Zone shall equal the product of: (i) the total of the system-wide Capacity Supply Obligations (excluding the quantity of capacity subject to Capacity Supply Obligation Bilaterals) plus HQICCs; and (ii) the ratio of the sum of all load serving entities' annual coincident contributions to the system-wide annual peak load in that Capacity Zone from the calendar year two years prior to the start of the Capacity Commitment Period to the system-wide sum of all load serving entities' annual coincident contributions to the system-wide annual peak load from the calendar year two years prior to the start of the Capacity Commitment Period. The following loads are assigned a peak contribution of zero for the purposes of assigning obligations and tracking load shifts: load associated with pumping of pumped hydro generators, if the resource was pumping; Station service load that is modeled as a discrete Load Asset and the Resource is complying with the maintenance scheduling procedures of the ISO; and transmission losses associated with delivery of energy over the Control Area tie lines.

A load serving entity's Capacity Requirement for each month and Capacity Zone shall equal the product of: (i) the Capacity Zone's Capacity Requirement as calculated above and (ii) the ratio of the sum of the load serving entity's annual coincident contributions to the system-wide annual peak load in that Capacity Zone from the calendar year prior to the start of the Capacity Commitment Period to the sum of all load

serving entities' annual coincident contributions to the system-wide annual peak load in that Capacity Commitment Period from the calendar year prior to the start of the Capacity Commitment Period.

A load serving entity's Capacity Load Obligation shall be its Capacity Requirement, adjusted as appropriate to account for any relevant Capacity Load Obligation Bilaterals, HQICCs, and Self-Supply FCA Resource designations. A Capacity Load Obligation can be a positive or negative value. A Market Participant that is not a load serving entity shall have a Capacity Load Obligation equal to the net obligation resulting from Capacity Load Obligation Bilaterals, HQICC, and Self-Supply FCA Resource designations.

A Demand Resource's Demand Reduction Value will not be reconstituted into the load of the Demand Resource for the purpose of determining the Capacity Requirement for the load associated with the Demand Resource.

#### III.13.7.3.1.1. HQICC Used in the Calculation of Capacity Requirements.

In order to treat HQICCs as a load reduction, each holder of HQICCs shall have its Capacity Requirement in the Capacity Zone in which the HQ Phase I/II external node is located as specified in Section III.13.1.3 adjusted by its share of the total monthly HQICC amount.

# III.13.7.3.1.2. Charges Associated with Self-Supplied FCA Resources.

The capacity associated with a Self-Supplied FCA Resource shall be treated as a credit toward the Capacity Load Obligation of the load serving entity so designated by such resources as described in Section III.13.1.6. The amount of Self-Supplied FCA Resources shall be determined pursuant to Section III.13.1.6.

#### III.13.7.3.1.3. Charges Associated with Dispatchable Asset Related Demands.

Dispatchable Asset Related Demand resources will not receive Forward Capacity Market payments, but instead each Dispatchable Asset Related Demand resource will receive an adjustment to its share of the associated Coincident Peak Contribution based on the ability of the Dispatchable Asset Related Demand resource to reduce consumption. The adjustment to a load serving entity's Coincident Peak Contribution resulting from Dispatchable Asset Related Demand resource reduction in consumption shall be based on the Nominated Consumption Limit submitted for the Dispatchable Asset Related Demand resource.

The Nominated Consumption Limit value of each Dispatchable Asset Related Demand resource is subject to adjustment as further described in the ISO New England Manuals, including adjustments based on the

results of Nominated Consumption Limit audits performed in accordance with the ISO New England Manuals.

#### III.13.7.3.2. Excess Revenues.

Revenues collected from load serving entities in excess of revenues paid by the ISO to resources shall be paid by the ISO to the holders of Capacity Transfer Rights, as detailed in Section III.13.7.3.3.

# III.13.7.3.3. Capacity Transfer Rights.

#### III.13.7.3.3.1. Definition and Payments to Holders of Capacity Transfer Rights.

The ISO shall create Capacity Transfer Rights ("CTRs") for each internal interface associated with a Capacity Zone established in the Forward Capacity Auction (as determined pursuant to Section III.13.2.3.4). Based upon results of the Forward Capacity Auction and reconfiguration auctions, the total CTR fund will be calculated as the difference between the charges to load serving entities with Capacity Load Obligations and the payments to Capacity Resources as follows: The system-wide sum of the product of each Capacity Zone's Net Regional Clearing Price and absolute value of each Capacity Zone's Capacity Load Obligations, as calculated in Section III.13.7.3.1, minus the sum of the monthly capacity payments to Capacity Resources within each zone, as adjusted for PER and for Demand Resource Performance Penalties net of Demand Resource Performance Incentives.

Each Capacity Zone established in the Forward Capacity Auction (as determined pursuant to Section III.13.2.3.4) will be assigned its portion of the CTR fund.

For CTRs resulting from an export constrained zone, the assignment will be calculated as the product of: (i) the Net Regional Clearing Price for the Capacity Zone to which the applicable interface limits the transfer of capacity minus the Net Regional Clearing Price for the Capacity Zone from which the applicable interface limits the transfer of capacity; and (ii) the difference between the absolute value of the total Capacity Supply Obligations obtained in the exporting Capacity Zone, adjusted for Capacity Supply Obligations associated with Self-Supply FCA Resources, and the absolute value of the total Capacity Load Obligations in the exporting Capacity Zone.

For CTRs resulting from an import constrained zone, the assignment will be calculated as the product of: (i) the Net Regional Clearing Price for the Capacity Zone to which the applicable interface limits the transfer of capacity minus the Net Regional Clearing Price for the absolute value of the Capacity Zone from which the applicable interface limits the transfer of capacity; and (ii) the difference between absolute value of the total Capacity Load Obligations in the importing Capacity Zone and the total Capacity Supply Obligations obtained in the importing Capacity Zone, adjusted for Capacity Supply Obligations associated with Self-Supply FCA Resources.

The value of CTRs specifically allocated pursuant to Sections III.13.7.3.3.2(c), III.13.7.3.3.4, and III.13.7.3.3.6 shall be calculated as the product of: (i) the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) for the Capacity Zone to which the applicable interface limits the transfer of capacity minus the Capacity Clearing Price (as adjusted pursuant to Section III.13.2.7.3(b)) for the Capacity Zone from which the applicable interface limits the transfer of capacity; and (ii) the MW quantity of the specifically allocated CTRs across the applicable interface. The value of the specifically allocated CTRs will be deducted from the associated Capacity Zone's portion of the CTR fund. The balance of the CTR fund will then be allocated to the load serving entities as set forth in Section III.13.7.3.3.2.

# III.13.7.3.3.2. Allocation of Capacity Transfer Rights.

For Capacity Zones established in the Forward Capacity Auction as determined pursuant to Section III.13.2.3.4, the CTR fund shall be allocated among load serving entities using their Capacity Load Obligation (net of HQICCs) described in Section III.13.7.3.1. Market Participants with CTRs specifically allocated under Section III.13.7.3.3.6 will have their specifically allocated CTR MWs netted from their Capacity Load Obligation used to establish their share of the CTR fund.

- (a) Connecticut Import Interface. The allocation of the CTR fund associated with the Connecticut Import Interface shall be made to load serving entities based on their Capacity Load Obligation in the Connecticut Capacity Zone.
- (b) **NEMA/Boston Import Interface**. Except as provided in Section III.13.7.3.3.6 of Market Rule 1, the allocation of the CTR fund associated with the NEMA/Boston Import Interface shall be made to load serving entities based on their Capacity Load Obligation in the NEMA/Boston Capacity Zone.
- (c) Maine Export Interface. Casco Bay shall receive specifically allocated CTRs of 325 MW across the Maine Export Interface for as long as Casco Bay continues to pay to support the transmission upgrades. Each municipal utility entitlement holder of a resource constructed as a Pool-Planned Unit in Maine shall receive specifically allocated CTRs across the Maine Export Interface equal to the applicable

seasonal claimed capability of its ownership entitlements in such unit as described in Section III.13.7.3.3.6. The balance of the CTR fund associated with the Maine Export Interface shall be allocated to load serving entities with a Capacity Load Obligation on the import-constrained side of the Maine Export Interface.

#### III.13.7.3.3.3. Allocations of CTRs Resulting From Revised Capacity Zones.

The portion of the CTR fund associated with revised definitions of Capacity Zones shall be fully allocated to load serving entities after deducting the value of applicable CTRs that have been specifically allocated. Allocations of the CTR fund among load serving entities will be made using their Capacity Load Obligations (net of HQICCs) as described in Section III.13.7.3.3.1. Market Participants with CTRs specifically allocated under Section III.13.7.3.3.6 will have their specifically allocated CTR MWs netted from the Capacity Load Obligation used to establish their share of the CTR fund.

- (a) **Import Constraints.** The allocation of the CTR fund associated with newly defined import-constrained Capacity Zones restricting the transfer of capacity into a single adjacent import-constrained Capacity Zone shall be allocated to load serving entities with Capacity Load Obligations in that import-constrained Capacity Zone.
- (b) **Export Constraints.** The allocation of the CTR fund associated with newly defined export-constrained Capacity Zones shall be allocated to load serving entities with Capacity Load Obligations on the import-constrained side of the interface.

# III.13.7.3.3.4. Specifically Allocated CTRs Associated with Transmission Upgrades.

- (a) A Market Participant that pays for transmission upgrades not funded through the Pool PTF Rate and which increase transfer capability across existing or potential Capacity Zone interfaces may request a specifically allocated CTR in an amount equal to the number of CTRs supported by that increase in transfer capability.
- (b) The allocation of additional CTRs created through generator interconnections completed after February 1, 2009 shall be made in accordance with the provisions of the ISO generator interconnection or planning standards. In the event the ISO interconnection or planning standards do not address this issue, the CTRs created shall be allocated in the same manner as described in Section III.13.7.3.3.2.
- (c) Specifically allocated CTRs shall expire when the Market Participant ceases to pay to support the transmission upgrades.

(d) CTRs resulting from transmission upgrades funded through the Pool PTF Rate shall not be specifically allocated but shall be allocated in the same manner as described in Section III.13.7.3.3.2.

# III.13.7.3.3.5. [Reserved.]

# III.13.7.3.3.6. Specifically Allocated CTRs for Pool Planned Units.

In import-constrained Capacity Zones, in recognition of longstanding life of unit contracts, the municipal utility entitlement holder of a resource constructed as Pool-Planned Units shall receive an initial allocation of CTRs equal to the applicable seasonal claimed capability of the ownership entitlements in such unit. Municipal utility entitlements are set as shown in the table below and are not transferrable.

|            |           |          |            |            |            |            |            |         | Summer | Winter |
|------------|-----------|----------|------------|------------|------------|------------|------------|---------|--------|--------|
|            | Millstone | Seabrook | Stonybrook | Stonybrook | Stonybrook | Stonybrook | Stonybrook | Wyman   | (MW)   | (MW)   |
|            | 3         |          | GT 1A      | GT 1B      | GT 1C      | 2A         | 2B         | 4       |        |        |
| Nominal    |           |          |            |            |            |            |            |         |        |        |
| Summer     |           |          |            |            |            |            |            |         |        |        |
| (MW)       | 1155.001  | 1244.275 | 104.000    | 100.000    | 104.000    | 67.400     | 65.300     | 586.725 |        |        |
| Nominal    |           |          |            |            |            |            |            |         |        |        |
| Winter     |           |          |            |            |            |            |            |         |        |        |
| (MW)       | 1155.481  | 1244.275 | 119.000    | 116.000    | 119.000    | 87.400     | 85.300     | 608.575 |        |        |
|            |           |          |            |            |            |            |            |         |        |        |
| Danvers    | 0.2627%   | 1.1124%  | 8.4569%    | 8.4569%    | 8.4569%    | 11.5551%   | 11.5551%   | 0.0000% | 58.26  | 63.73  |
| Georgetown | 0.0208%   | 0.0956%  | 0.7356%    | 0.7356%    | 0.7356%    | 1.0144%    | 1.0144%    | 0.0000% | 5.04   | 5.55   |
| Ipswich    | 0.0608%   | 0.1066%  | 0.2934%    | 0.2934%    | 0.2934%    | 0.0000%    | 0.0000%    | 0.0000% | 2.93   | 2.37   |
| Marblehead | 0.1544%   | 0.1351%  | 2.6840%    | 2.6840%    | 2.6840%    | 1.5980%    | 1.5980%    | 0.2793% | 15.49  | 15.64  |
| Middleton  | 0.0440%   | 0.3282%  | 0.8776%    | 0.8776%    | 0.8776%    | 1.8916%    | 1.8916%    | 0.1012% | 10.40  | 11.07  |
| Peabody    | 0.2969%   | 1.1300%  | 13.0520%   | 13.0520%   | 13.0520%   | 0.0000%    | 0.0000%    | 0.0000% | 57.69  | 60.26  |
| Reading    | 0.4041%   | 0.6351%  | 14.4530%   | 14.4530%   | 14.4530%   | 19.5163%   | 19.5163%   | 0.0000% | 82.98  | 92.77  |
| Wakefield  | 0.2055%   | 0.3870%  | 3.9929%    | 3.9929%    | 3.9929%    | 6.3791%    | 6.3791%    | 0.4398% | 30.53  | 32.64  |

This allocation of CTRs shall expire on December 31, 2040. If a resource listed in the table above retires prior to December 31, 2040, however, its allocation of CTRs shall expire upon retirement. In the event that the NEMA zone either becomes or is forecast to become a separate zone for Forward Capacity Auction purposes, National Grid agrees to discuss with Massachusetts Municipal Wholesale Electric Company ("MMWEC") and Wellesley Municipal Light Plant, Reading Municipal Light Plant and Concord Municipal Light Plant ("WRC") any proposal by National Grid to develop cost effective transmission improvements that would mitigate or alleviate the import constraints and to work cooperatively and in good faith with MMWEC and WRC regarding any such proposal. MMWEC and WRC agree to support any proposals advanced by National Grid in the regional system planning process to construct any such transmission improvements, provided that MMWEC and WRC determine that the proposed improvements are cost effective (without regard to CTRs) and will mitigate or alleviate the import constraints.

#### III.13.7.3.4. Forward Capacity Market Net Charge Amount.

The Forward Capacity Market net charge amount for each Market Participant as of the end of the Obligation Month shall be equal to the sum of: (a) its Capacity Load Obligation charge; (b) its revenues from any applicable specifically allocated CTRs; (c) its share of the CTR fund; and (d) any applicable export charges.

# **SECTION III**

# MARKET RULE 1

# **APPENDIX E1**

# **DEMAND RESPONSE**

Appendix E1 applies to Capacity Commitment Periods commencing prior to June 1, 2017.

# APPENDIX E1

# **DEMAND RESPONSE**

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# Appendix E1 applies to Capacity Commitment Periods commencing prior to June 1, 2017.

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#### **APPENDIX E1**

#### **DEMAND RESPONSE**

#### 1. Demand Response Registration

Appendix E1 applies to Capacity Commitment Periods commencing prior to June 1, 2017.

A Market Participant may register a Real-Time Demand Response Asset associated with a Real-Time Demand Response Resource for purposes of submitting Demand Reduction Offers on a Day-Ahead and Real-Time basis to provide demand reductions during hours ending 0800 through 1800 on non-Demand Response Holiday weekdays subject to the following conditions:

- (a) the asset is able to produce at least 100 kW of demand reduction, and;
- (b) the metering and communication equipment associated with the asset meets the requirements specified in Section III.E1.2.

A Real-Time Demand Response Asset may consist of an aggregation of multiple end-use metered customers.

#### 1.1 Registration Parameters

During the registration process, Market Participants must submit the following information for each Real-Time Demand Response Asset:

- (a) Maximum Interruptible Capacity;
- (b) Maximum Load, and;
- (c) Maximum Generation, for Real-Time Demand Response Assets that are comprised of Distributed Generation.

# 1.2 Restrictions on Real-Time Demand Response Asset Registration

A Market Participant may not register and must retire if previously registered a Real-Time Demand Response Asset that is comprised of:

- (a) the customers of Host Utilities that distributed more than 4 million MWh in the previous fiscal year, if the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into the ISO-administered markets or programs, or;
- (b) the customers of Host Utilities that distributed 4 million MWh or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers' demand response to be bid into the ISO-administered markets or programs.

A Market Participant may not register an existing Generator Asset as a Real-Time Demand Response Asset for the purpose of submitting Demand Reduction Offers.

#### 2. Metering and Communication

#### 2.1 Interval Metering and Telemetry Requirements

The actual metered demand of each individual end-use customer facility that comprises a Real-Time Demand Response Asset must be measured using interval meters located at the individual end-use customer's retail delivery point and shall be reported to the ISO at an interval of five minutes. Actual metered demand submitted to the ISO shall not include average avoided peak distribution losses. Each generator located behind an individual end-use customer's retail delivery point shall be separately measured using an interval meter and shall be reported to the ISO at an interval of five minutes.

Interval meters required pursuant to Section III.E1.2.1 must meet the following requirements:

- (a) the interval meter must record and report meter data to the ISO in Real-Time at an interval of fiveminutes or less;
- (b) if the interval meter is the same meter used by the distribution company for billing purposes, the meter is a revenue-quality meter that is accurate within  $\pm$  0.5%, and;
- (c) if the interval meter is not the same meter used by the distribution company for billing purposes, the interval meter is either a revenue-quality meter that is accurate within  $\pm$  0.5% or a non-revenue-

quality meter with an overall accuracy of  $\pm$  2.0%. For each non-revenue-quality meter used, the Market Participant must, during the registration process, submit certification from the meter manufacturer that the interval meter being used meets the  $\pm$  2.0% accuracy threshold, and shall specify accuracy for the following parameters:

- i. current measurement;
- ii. voltage measurement;
- iii. A/D conversion, and;
- iv. calibration.

# 2.2 Meter Testing

All interval meters must be periodically tested and calibrated.

Market Participants must conduct periodic meter data validation checks.

Market Participants must repair or replace meters that are found to be inaccurate pursuant to periodic testing and data validation checks.

Market Participants must perform an annual independent certification of the accuracy and precision of the meters and meter data communication systems.

# 2.3 Auditing

The ISO may, for a Real-Time Demand Response Asset, review and audit testing and calibration records, audit facility performance (including review of facility equipment), order and witness the testing of metering and measurement equipment, and witness the demand reduction activities of any facility associated with the asset.

Market Participants must make retail billing meter data from the Host Participant for the facilities associated with a Real-Time Demand Response Asset available to the ISO upon request.

Market Participants are responsible for all expenses associated with installing, maintaining, calibrating, testing, and certifying the metering, data recording and measurement equipment of Real-Time Demand Response Assets.

#### 2.4 Communication/Telemetry

Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facilities comprising the Real-Time Demand Response Asset on the electricity network in the New England Control Area.

For Real-Time Demand Response Assets whose demand reductions are not achieved by Distributed Generation but where there is a generator located behind the retail delivery point, Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facility comprising the Real-Time Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of all generation.

For Real-Time Demand Response Assets whose demand reductions are achieved by Distributed Generation, Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facility comprising the Real-Time Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of Distributed Generation associated with the Real-Time Demand Response Asset.

#### 3. Demand Reduction Offers

#### 3.1 Required Demand Reduction Offer Parameters

Market Participants must submit a Demand Reduction Offer for each Real-Time Demand Response Asset that meets the requirements of this section in order to be eligible for a demand reduction payment.

A Demand Reduction Offer must be equal to or greater than the Demand Reduction Threshold Price in effect on the day the Demand Reduction Offer is made.

Demand Reduction Offers reflect the amount of demand reduction offered at the retail delivery point excluding transmission and distribution losses.

A Demand Reduction Offer shall consist of a single offer price in \$/MWh (less than or equal to \$1000/MWh) and a single demand reduction amount (in MW to the nearest 0.1 MW) that shall apply to hours ending 0800 through 1800 in the Operating Day.

A Market Participant may submit a single Demand Reduction Offer for each of its Real-Time Demand Response Assets for each Operating Day that is a non-Demand Response Holiday weekday.

Demand Reduction Offers for the following Operating Day must be submitted by the offer submission deadline for the Day-Ahead Energy Market of the day before the Operating Day and may not be changed thereafter.

The minimum Demand Reduction Offer amount for each Real-Time Demand Response Asset is 100 kW.

The maximum Demand Reduction Offer amount for each Real-Time Demand Response Asset cannot exceed the asset's Maximum Interruptible Capacity.

# 3.2 Optional Demand Reduction Offer Parameters

A Demand Reduction Offer may specify a minimum interruption duration of one to four hours. If a Market Participant does not specify a minimum interruption duration in its Demand Reduction Offer, the minimum interruption duration shall be one hour.

A Demand Reduction Offer may specify a curtailment initiation price (in \$ per interruption). If a Market Participant does not specify a curtailment initiation price, the curtailment initiation price shall be \$0.

A Demand Reduction Offer must meet the following minimum and maximum price requirements:

- (a) The offer price not including the curtailment initiation price shall be greater than or equal to the Demand Reduction Threshold Price; and
- (b) The offer cost of the Demand Reduction Offer, which shall include the curtailment initiation price, shall be less than or equal to \$1000/MWh. The offer cost shall be computed as follows: offer cost = offer price + [curtailment initiation price/(minimum interruption duration x bid amount (MW))].

#### 4. Day-Ahead Clearing, Scheduling and Notification

Demand Reduction Offers are cleared after the Day-Ahead Energy Market results are determined.

Demand Reduction Offers are cleared by comparing the Demand Reduction Offer to the hourly Day-Ahead LMPs for the Load Zone in which the Real-Time Demand Response Asset is located. A Demand Reduction Offer associated with a Real-Time Demand Response Asset will clear in one or more hours of the Operating Day if the sum of the hourly Day-Ahead LMP times the Demand Reduction Offer amount in the cleared hours of the Operating Day is greater than or equal to the sum of the curtailment initiation price for the Operating Day and the sum of the Demand Reduction Offer price times the Demand Reduction Offer amount in the cleared hours of the Operating Day.

The ISO will provide Market Participants with demand curtailment schedules for Real-Time Demand Response Assets based on cleared Demand Reduction Offers.

The demand curtailment schedule shall reflect demand reductions (MW) at the Real-Time Demand Response Asset's retail delivery point.

#### 5. Real-Time Scheduling of Demand Reductions

A Demand Reduction Offer shall continue to apply in Real-Time during the Operating Day even if the Demand Reduction Offer is not scheduled Day-Ahead for the next Operating Day pursuant to Section III.E1.4. If a Market Participant's Demand Reduction Offer is not cleared Day-Ahead to reduce demand in an hourly time interval for the next Operating Day, the Market Participant may initiate a Real-Time demand reduction by reducing demand when the offer price (not including the curtailment initiation price) is less than or equal to the provisional hourly Real-Time LMP published in the Operating Day for the Load Zone in which a Real-Time Demand Response Asset is located.

A Market Participant will not receive a Dispatch Instruction in Real-Time for a Real-Time Demand Response Asset.

#### 5.1 Requirements for Demand Reductions of 5 MW and Above

A Market Participant with a Real-Time Demand Response Asset that has submitted a Demand Reduction Offer for the Operating Day, must request permission from the ISO prior to reducing demand in an amount greater than or equal to 5 MW during a 60 minute period, unless the asset was dispatched or audited pursuant to Section III.13. Permission must be requested not less than 15 minutes and not greater than 60 minutes before the start of the demand reduction. The ISO may approve or deny the requested interruption based on the impact of the interruption on system reliability.

#### 6. Determination of the Demand Reduction Threshold Price

The Demand Reduction Threshold Price for each month shall be determined through an analysis of a smoothed supply curve for the month. The smoothed supply curve shall be derived from real-time generator and import offer data for the same month of the previous year. The ISO may adjust the offer data to account for significant changes in generator and import availability or other significant changes to the historic supply curve. The historic supply curve shall be calculated as follows:

- Each generator and import offer block (i.e., each price-quantity pair offered in the Real-Time
  Energy Market) for each day of the month shall be compiled and sorted in ascending order of price
  to create an unsmoothed supply curve.
- ii. An unsmoothed supply curve for the month shall be formed from the price and cumulative quantity of each offer block.
- iii. A non-linear regression shall be performed on a sampled portion of the unsmoothed supply curve to produce an increasing, convex, smooth approximation of the supply curve.
- iv. A historic threshold price  $P_{th}$  shall be determined as the point on the smoothed supply curve beyond which the benefit to load from the reduced LMP resulting from demand response exceeds the cost to load associated with compensating demand response.
- v. The Demand Reduction Threshold Price for the upcoming month shall be determined by the following formula:

$$DRTP = P_{th} \times \frac{FPI_c}{FPI_h}$$

where  $FPI_h$  is the historic fuel price index for the same month of the previous year, and  $FPI_c$  is the fuel price index for the current month.

The historic and current fuel price indices used to establish the Demand Reduction Threshold Price for a month shall be based on the lesser of the monthly natural gas or heating oil fuel indices applicable to the New England Control Area, as calculated three business days before the start of the month preceding the Demand Reduction Threshold Price's effective date.

The ISO will post the resulting Demand Reduction Threshold Price, along with the index-based fuel price values used in establishing the Demand Reduction Threshold Price, on its website by the 15<sup>th</sup> day of the preceding month in advance of the Demand Reduction Threshold Price's effective date.

The Demand Reduction Threshold Price shall apply to all Demand Reduction Offers associated with Real-Time Demand Response Assets located anywhere within the New England Control Area.

#### 7. Demand Response Baselines

A Market Participant must establish a Demand Response Baseline pursuant to Section III.8A prior to submitting a Demand Reduction Offer for a Real-Time Demand Response Asset.

A Market Participant shall take no actions to establish a Demand Response Baseline or affect a Demand Response Baseline adjustment that results in a Demand Response Baseline that exceeds the expected electricity consumption levels of its end-use metered customers absent demand reduction payments.

For Real-Time Demand Response Assets comprised of Distributed Generation, a Market Participant shall take no actions to establish a Demand Response Baseline that results in a Demand Response Baseline that reduces the expected output levels of its generation absent demand reduction payments.

#### 8. Real-Time Demand Reduction Obligations

#### 8.1 Real-Time Demand Reduction of Assets Without Generation

The Real-Time demand reduction amount of a Real-Time Demand Response Asset is equal to the difference between its Demand Response Baseline adjusted pursuant to Section III.8A.4 and the asset's Real-Time metered demand, during the intervals that the Real-Time Demand Response Asset was scheduled Day-Ahead by the ISO to reduce demand or was otherwise eligible to receive payment for a demand reduction in Real-Time. A Real-Time Demand Response Asset's Real-Time demand reduction amount is negative if the asset's Real-Time metered demand is greater than its adjusted Demand Response Baseline.

#### 8.2 Real-Time Demand Reduction of Assets With Generation

To the extent a generator is located behind the retail delivery point of an individual end-use customer facility that comprises a Real-Time Demand Response Asset, the metered output of the generator in each five-minute interval shall be added to the metered demand measured at the retail delivery point in the same intervals to determine the Real-Time Demand Response Asset's Demand Response Baseline. The Real-Time demand reduction amount achieved by the individual end-use customer facility that comprises a Real-Time Demand Response Asset shall be equal to the asset's adjusted Demand Response Baseline in each five-minute interval minus the sum of the metered demand measured at the retail delivery point and the output of all of the generators located behind the Real-Time Demand Response Asset's retail delivery point in the same time intervals. A Real-Time Demand Response Asset's Real-Time demand reduction amount is negative if the sum of the asset's Real-Time metered demand and the output of all of the generators is greater than its adjusted Demand Response Baseline.

If a Real-Time Demand Response Asset is comprised of a Distributed Generation asset located behind the retail delivery point of an individual end-use customer facility, the interval metered output of the Real-Time Demand Response Asset comprised of the Distributed Generation asset shall be used to determine its Demand Response Baseline. The Real-Time demand reduction amount achieved by the Real-Time Demand Response Asset comprised of the Distributed Generation asset shall be equal to the asset's incremental output in each five-minute interval relative to its Demand Response Baseline in the same intervals. A Real-Time Demand Response Asset's Real-Time demand reduction amount is negative if the asset's Real-Time metered output is less than its Demand Response Baseline.

#### 8.3 Treatment of Net Supply

If the metered amount measured at the retail delivery point reflects net energy supply during intervals in which Real-Time Demand Response Assets and/or Real-Time Emergency Generation Assets behind the retail delivery point had positive Real-Time demand reductions, then the amount of net energy supplied in an interval with a positive Real-Time demand reduction shall be subtracted from the Real-Time demand reduction amount in the same interval of each Real-Time Demand Response Asset and/or Real-Time Emergency Generation Asset behind that retail delivery point on a *pro rata* basis. The adjustment for net energy supply shall not result in a negative Real-Time demand reduction amount.

#### 8.4 Real-Time Demand Reduction Obligations

The Real-Time Demand Reduction Obligation of a Real-Time Demand Response Asset is equal to its Real-Time demand reduction amount adjusted for net supply (limited to 200% of the associated Demand Reduction Offer amount) multiplied by one plus the percent average avoided peak distribution losses.

#### 9. Settlement

# 9.1 Day-Ahead Settlement

A Market Participant with a Real-Time Demand Response Asset will be paid for its Day-Ahead Demand – Reduction Obligation multiplied by the Day-Ahead LMP for the Load Zone within which the Real-Time Demand Response Asset is located.

#### 9.2 Real-Time Settlement

#### 9.2.1. Real-Time Demand Response Assets with Cleared Demand Reduction Offers

A Market Participant with a Real-Time Demand Response Asset will be paid or charged for the difference between its Real-Time Demand Reduction Obligation and its Day-Ahead Demand Reduction Obligation multiplied by the final hourly Real-Time LMP for the Load Zone within which the Real-Time Demand Response Asset is located. The payment for the amount by which the Real-Time Demand Reduction

Obligation exceeds the Day-Ahead Demand Reduction Obligation in an hour shall be set to zero if the provisional Real-Time LMP for that hour is less than the Demand Reduction Threshold Price.

A Market Participant will not be charged for the difference between its Real-Time Demand Reduction Obligation and its Day-Ahead Demand Reduction Obligation for which a demand reduction request is denied pursuant to Section III.E1.5.1.

#### 9.2.2. Real-Time Demand Response Assets without Cleared Demand Reduction Offers

If the Demand Reduction Offer price (not including the curtailment initiation price) is less than or equal to the provisional hourly Real-Time LMP published in the Operating Day for the Load Zone in which the Real-Time Demand Response Asset is located, the Market Participant will be paid the final hourly Real-Time LMP multiplied by its Real-Time Demand Reduction Obligation.

A Market Participant will not be charged pursuant to Section III.E1.9.2.2 if:

- (a) a Demand Reduction Offer does not clear Day-Ahead pursuant to Section III.E1.4, and;
- (b) the Real-Time Demand Response Asset produces a negative Real-Time demand reduction amount.

A Market Participant will not be paid for a Real-Time Demand Reduction Obligation for which a demand reduction request is denied pursuant to Section III.E1.5.1.

#### 9.3 Cost Allocation

Payments and charges pursuant to this section will be allocated on an hourly basis proportionally to Market Participants with Real-Time Load Obligation, excluding Real-Time Load Obligation incurred at all External Nodes or incurred by Dispatchable Asset Related Demand Postured by the ISO, on a system-wide basis.

#### 10. Average Distribution Losses

For purposes of Section III.E1, the percent average avoided peak distribution losses shall be the percent average avoided peak transmission and distribution losses used for the associated Capacity Commitment Period in the Forward Capacity Market less the percent average avoided peak transmission system losses.

# **SECTION III**

# MARKET RULE 1

# **APPENDIX E2**

# DEMAND RESPONSE

Appendix E2 applies to Capacity Commitment Periods commencing on or after June 1, 2017.

# **APPENDIX E2**

# **DEMAND RESPONSE**

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# Appendix E2 applies to Capacity Commitment Periods commencing on or after June 1, 2017.

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# APPENDIX E2 DEMAND RESPONSE

Appendix E2 applies to Capacity Commitment Periods commencing on or after June 1, 2017.

#### 1. Demand Response Registration

# 1.1 Demand Response Resource Registration

A Market Participant may register a Demand Response Resource for purposes of submitting Demand Reduction Offers on a Day-Ahead and Real-Time basis subject to the following conditions:

- (a) each Demand Response Resource must be a single Demand Response Asset or an aggregation of Demand Response Assets located within the same Dispatch Zone;
- (b) each Demand Response Resource must be able to produce at least 100 kW of demand reduction; and
- (c) the Market Participant must comply with ISO required auditing and testing requirements.

A Market Participant may not register a Real-Time Emergency Generation Resource, an On-Peak Demand Resource, a Seasonal Peak Demand Resource or a Dispatchable Asset Related Demand to participate as a Demand Response Resource in the Day-Ahead Energy Market or Real-Time Energy Market. A Market Participant may not register an existing Generator Asset as a Demand Response Asset for the purpose of submitting Demand Reduction Offers.

#### 1.2 Demand Response Capacity Resource Registration

A Market Participant may register a Demand Response Capacity Resource subject to the following conditions:

(a) each Demand Response Capacity Resource must have mapped to it at least one Demand Response Resource within the same Dispatch Zone in order to comply with the energy market offer requirements in Section III.13.6.1.5; and

(b) a Demand Response Resource cannot be mapped to a Demand Response Capacity Resource, or maintain the mapping to a Demand Response Capacity Resource, if the Demand Response Resource violates the mapping provisions in Section III.E2.1.4(c).

# 1.3 Demand Response Asset Registration

A Market Participant may register a Demand Response Asset subject to the following conditions:

- (a) Unless it meets the conditions for aggregation in sub-section (b) below, a Demand Response Asset must have a defined, single Retail Delivery Point and be registered at a single Node. For each Demand Response Aset capable of delivering Net Supply, a single Net Supply Generator Asset may be registered at the same Node as the Demand Response Asset unless the asset meets the conditions for aggregation in sub-section (b) below.
- (b) A Demand Response Asset may be the aggregate consumption of multiple end-use customers from multiple delivery points within a single Dispatch Zone if (i) the demand reduction from each Retail Delivery Point in the aggregation is less than 10 kW, and (ii) the demand at the multiple Retail Delivery Points satisfy the criteria for a homogenous population. A Demand Response Asset that meets these conditions for aggregation must be registered at the Dispatch Zone rather than the Node. For each Demand Response Asset capable of delivering Net Supply that meets the conditions for aggregation as described in this sub-section, a single Net Supply Generator Asset may be registered at the same Dispatch Zone as the Demand Response Asset,
- (c) No more than one Demand Response Asset may be located at a single Retail Delivery Point.
- (d) Each Demand Response Asset must be mapped to a Demand Response Resource.
- (e) Each Demand Response Asset must be able to produce at least 10 kW of demand reduction.
- (f) A Demand Response Asset with a registered Maximum Interruptible Capacity equal to or greater than 5 MW from the same Retail Delivery Point must be registered as a single Demand Response Resource at a Node. A Demand Response Asset capable of delivering Net Supply where the sum of its Maximum Interruptible Capacity and Maximum Net Supply from the same Retail Delivery Point is equal to or greater than 5 MW must register as a single Demand Response Resource at a Node and may register a single Net Supply Generator Asset at the same Node. In the event the Demand Response Asset and associated Net Supply Generator Asset have participated in a seasonal audit, the evaluation of whether Demand Response Asset's Maximum Interruptible

Capacity or the sum of the Maximum Interruptible Capacity and Net Supply is equal to or greater than 5 MW shall account for the most recent seasonal audit results for the assets.

(g) The metering and communication equipment associated with each Demand Response Asset must meet the requirements in Section III.E2.2.

During the registration process, Market Participants must submit the following for each Demand Response Asset:

- (a) Maximum Interruptible Capacity;
- (b) Maximum Load;
- (c) Maximum Generation, for Demand Response Assets that are comprised of Distributed Generation;
- (d) For any Net Supply Generator Asset associated with a Demand Response Asset, the Maximum Net Supply; and
- (e) retail account number and meter number for the end-use customer.

#### 1.4 Restrictions on Demand Response Resource Registration

A Market Participant may not register and must retire if previously registered a Demand Response Resource that is comprised of:

- (a) the customers of Host Utilities that distributed more than 4 million MWh in the previous fiscal year, if the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into the ISO-administered markets or programs, or;
- (b) the customers of Host Utilities that distributed 4 million MWh or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers' demand response to be bid into the ISO-administered markets or programs.
- (c) The Maximum Interruptible Capacity adjusted for the Audited Demand Reduction of each Demand Response Resource registered by a Market Participant within a single Dispatch Zone must be at least 1 MW before the Market Participant registers a new Demand Response Resource within that same Dispatch Zone. This restriction shall not apply if either:
  - (i) all Demand Response Assets registered by the Market Participant in the Dispatch Zone are mapped to a Demand Response Resource mapped to a Demand Response Capacity

- Resource and the Market Participant wants to register a Demand Response Resource that is not mapped to a Demand Response Capacity Resource; or
- (ii) all Demand Response Assets registered by the Market Participant in the Dispatch Zone are mapped to a Demand Response Resource not mapped to a Demand Response Capacity Resource and the Market Participant wants to register a Demand Response Resource that is mapped to a Demand Response Capacity Resource.
- (d) In the event the Audited Demand Reductions of two or more Demand Response Resources registered by a Market Participant within a single Dispatch Zone are less than 1 MW following an audit, Demand Response Asset mapping for that Market Participant shall be adjusted if doing so decreases the number of Demand Response Resources within that Dispatch Zone.

# 1.5 Restrictions on Demand Response Asset Mapping

Demand Response Assets may be un-mapped from a Demand Response Resource for re-mapping to another Demand Response Resource, or un-mapped without re-mapping, subject to the following conditions:

- (a) A Demand Response Asset cannot be unmapped from a Demand Response Resource that is mapped to a Demand Response Capacity Resource if, following the un-mapping, the sum of the demand reductions of the remaining Demand Response Assets that are associated with the Demand Response Capacity Resource, as reflected in the most recent seasonal audit for that resource, would be lower than the resource's highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period.
- (b) When a Demand Response Asset can be mapped to more than one Demand Response Resource that is mapped to a Demand Response Capacity Resource, a Demand Response Asset shall be mapped to a Demand Response Resource associated with a Demand Response Capacity Resource whose demand reduction capability is less that the lower of (i) its commercial capacity, as reflected in the resource's highest audit value or (ii) its highest Capacity Supply Obligation acquired for the current Capacity Commitment Period or any future Capacity Commitment Period before being mapped to a Demand Response Resource associated with a non-commercial Demand Response Capacity Resource or non-commercial increment of a Demand Response Capacity Resource.
- (c) A Demand Response Asset may be re-mapped to another Demand Response Resource only if the Audited Full Reduction Time of the asset's new Demand Response Resource, adjusted for the Audited Demand Reduction of the asset's current Demand Response Resource, is equal to

- or greater than the Audited Full Reduction Time of the Demand Response Resource from which the Demand Response Asset is being un-mapped.
- (d) If a Demand Response Asset is re-mapped to a Demand Response Resource, and the Audited Full Reduction Time of the Demand Response Resource to which the asset is being mapped, adjusted for the Audited Demand Reduction of the Demand Response Resource from which the asset is being mapped, is less than the Audited Full Reduction Time of the Demand Response Resource from which the asset is being mapped, the Demand Response Asset audit value will be set to zero.

#### 2. Metering and Communication

# 2.1 Interval Metering and Telemetry Requirements

The metered demand of each individual end-use customer facility that comprises a Demand Response Asset must be measured using interval meters located at the individual end-use customer's Retail Delivery Point and shall be reported to the ISO at an interval of five minutes. Metered demand data submitted to the ISO shall not include average avoided peak distribution losses. Each generator located behind an individual end-use customer's Retail Delivery Point shall be separately measured using an interval meter and shall be reported to the ISO at an interval of five minutes.

The interval meters required pursuant to Section III.E2.2.1 must meet the following requirements:

- (a) The interval meter must record and report meter data to the ISO in Real-Time at an interval of five-minutes or less:
- (b) If the interval meter is the same meter used by the distribution company for billing purposes, the meter is a revenue-quality meter that is accurate within  $\pm$  0.5%; and
- (c) If the interval meter is not the same meter used by the distribution company for billing purposes, the interval meter is either a revenue-quality meter that is accurate within  $\pm$  0.5% or a non-revenue-quality meter with an overall accuracy of  $\pm$  2.0%. For each non-revenue-quality meter used, the Market Participant must, during the registration process, submit certification from the meter manufacturer that the interval meter being used meets the  $\pm$  2.0% accuracy threshold, and shall specify accuracy for the following parameters:
  - i. current measurement;
  - ii. voltage measurement;
- iii. A/D conversion; and
- iv. calibration.

#### 2.2 Communication/Telemetry

The Market Participant must utilize a remote terminal unit for communicating telemetry and receiving dispatch instructions from the ISO.

Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facilities that comprise the Demand Response Asset on the electricity network in the New England Control Area.

For Demand Response Assets whose demand reductions are not achieved by Distributed Generation but where there is a generator located behind the Retail Delivery Point, Market Participants must submit a single set of interval meter data representing the metered demand of the end-use facility that comprises the Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of all generation.

For Demand Response Assets whose demand reductions are achieved by Distributed Generation, Market Participants must submit a single set of interval meter data representing the metered demand of the enduse facility that comprises the Demand Response Asset on the electricity network in the New England Control Area and a single set of interval meter data representing the combined output of Distributed Generation associated with the Demand Response Asset.

#### 2.3 Meter Testing

All interval meters must be periodically tested and calibrated.

Market Participants must conduct periodic meter data validation checks.

Market Participants must repair or replace meters that are found to be inaccurate pursuant to periodic testing and data validation checks.

Market Participants must perform an annual independent certification of the accuracy and precision of the meters and meter data communication systems.

#### 2.4 Auditing

The ISO may, for Demand Response Resources, review and audit testing and calibration records, audit facility performance (including review of facility equipment), order and witness the testing of metering

and measurement equipment, and witness the demand reduction activities of any facility associated with a Demand Response Asset.

Market Participants must make retail billing meter data from the Host Participant for the facilities associated with a Demand Response Asset available to the ISO upon request.

Market Participants are responsible for all expenses associated with installing, maintaining, calibrating, testing and certifying the metering, data recording and measurement equipment of Demand Response Assets.

#### 3. Day-Ahead Energy Market Demand Reduction Offers

Market Participants must submit a Demand Reduction Offer for each Demand Response Resource that meets the requirements of this section in order to be eligible for a demand reduction payment.

The Market Participant's Demand Reduction Offer for a Demand Response Resource must satisfy the following conditions:

- (a) Demand Reduction Offers must be submitted by the offer submission deadline for the Day-Ahead Energy Market of the day before the applicable Operating Day.
- (b) The Market Participant can submit up to 10 monotonically increasing price/demand reduction amount pairs for each Operating Day. The demand reduction amount shall not include an adjustment for average avoided peak transmission and distribution losses.
- (c) The minimum amount for each price/demand reduction amount pair of a Demand Reduction Offer is 100 kW.
- (d) The sum of all price/demand reduction amount pairs for a Demand Reduction Offer cannot exceed the sum of the Maximum Interruptible Capacities of the resource's Demand Response Assets.
- (e) The minimum Demand Reduction Offer price must be equal to or greater than the Demand Reduction Threshold Price in effect for the day the Demand Reduction Offer is submitted.
- (f) The maximum Demand Reduction Offer price must be less than or equal to \$1000/MWh.

Market Participants may not Self-Schedule interruptions in the Day-Ahead Energy Market.

#### 3.1 Required Demand Reduction Offer Parameters

The Market Participant shall provide the following hourly values in its Demand Reduction Offer. The Market Participant shall maintain up-to-date values for each of these parameters prior to and throughout the Operating Day:

- (a) Available or Unavailable;
- (b) Minimum Reduction (MW), and;
- (c) Maximum Reduction (MW).

#### 3.2 Optional Demand Reduction Offer Parameters

The Market Participant may also specify the following in its Demand Reduction Offer:

- (a) Interruption Cost (\$)
- (b) Minimum Reduction Time (Hrs)
- (c) Minimum Time Between Reductions (Hrs)
- (d) Demand Response Resource Start-Up Time (Hrs)
- (e) Demand Response Resource Notification Time (Hrs)
- (f) Demand Response Resource Ramp Rate (MW/min)

#### 4. Real-Time Energy Market Demand Reduction Offers

During the Re-Offer Period, Market Participants may submit revisions to the price or demand reduction amount parameters of a Demand Reduction Offer. Demand Response Resources scheduled subsequent to the closing of the Re-Offer Period shall be settled at the applicable Real-Time Prices.

Revisions to Demand Reduction Offers during the Re-Offer Period are subject to the following conditions that apply to Day-Ahead Demand Reduction Offers under Section III.E2.3: limitation to 10 monotonically increasing price/demand reduction amount pairs, minimum amount, maximum amount, minimum price and maximum price.

A Demand Reduction Offer shall continue to apply in Real-Time during the Operating Day even if the Demand Reduction Offer is not scheduled Day-Ahead for that Operating Day pursuant to Section III.E2.5 or modified during the Re-Offer Period.

No changes will be allowed to the Demand Reduction Offer after the close of the Re-Offer Period. Market Participants may not Self-Schedule interruptions in the Real-Time Energy Market.

#### 5. Scheduling and Dispatching

The ISO shall schedule in the Day-Ahead Energy Market and commit and dispatch in the Real-Time Energy Market the Demand Response Resource based on:

- (a) least-cost, security-constrained dispatch and commitment as specified in Section III.1.7.6(a); and
- (b) the Demand Reduction Offer for the Demand Response Resource, with demand reduction amounts adjusted by average avoided peak distribution losses.

At the conclusion of the Day-Ahead Energy Market clearing, the ISO will provide Market Participants with Day-Ahead demand reduction schedules for Demand Response Resources reflecting demand reduction amounts that do not include average avoided peak transmission and distribution losses for each hour of the following Operating Day.

During the Operating Day, the ISO will issue Dispatch Instructions to the Market Participant specifying the expected demand reduction amount that does not include average avoided peak transmission and distribution losses from their Demand Response Resource and the Dispatch Rate.

A Market Participant must notify the ISO, as soon as practicable, of a facility shutdown or equipment outage (including partial outages) that reduces the Demand Response Resource's ability to achieve the demand reduction reflected in the Demand Reduction Offer for an Operating Day. Net Supply Generator Assets will be dispatched at the same Location as the Demand Response Resource with which they are associated.

#### 6. Determination of the Demand Reduction Threshold Price

The Demand Reduction Threshold Price for each month shall be determined through an analysis of a smoothed supply curve for the month. The smoothed supply curve shall be derived from real-time generator and import offer data for the same month of the previous year. The ISO may adjust the offer

data to account for significant changes in generator and import availability or other significant changes to the historic supply curve. The historic supply curve shall be calculated as follows:

- (a) Each generator and import offer block (i.e., each price-quantity pair offered in the Real-Time Energy Market) for each day of the month shall be compiled and sorted in ascending order of price to create an unsmoothed supply curve.
- (b) An unsmoothed supply curve for the month shall be formed from the price and cumulative quantity of each offer block.
- (c) A non-linear regression shall be performed on a sampled portion of the unsmoothed supply curve to produce an increasing, convex, smooth approximation of the supply curve.
- (d) A historic threshold price  $P_{th}$  shall be determined as the point on the smoothed supply curve beyond which the benefit to load from the reduced LMP resulting from demand response exceeds the cost to load associated with compensating demand response.
- (e) The Demand Reduction Threshold Price for the upcoming month shall be determined by the following formula:

$$DRTP = P_{th} \times \frac{FPI_c}{FPI_h}$$

where  $FPI_h$  is the historic fuel price index for the same month of the previous year, and  $FPI_c$  is the fuel price index for the current month.

The historic and current fuel price indices used to establish the Demand Reduction Threshold Price for a month shall be based on the lesser of the monthly natural gas or heating oil fuel indices applicable to the New England Control Area, as calculated three business days before the start of the month preceding the Demand Reduction Threshold Price's effective date.

The ISO will post the resulting Demand Reduction Threshold Price, along with the index-based fuel price values used in establishing the Demand Reduction Threshold Price, on its website by the 15<sup>th</sup> day of the preceding month in advance of the Demand Reduction Threshold Price's effective date.

The Demand Reduction Threshold Price shall apply to all Demand Reduction Offers associated with Demand Response Resources located anywhere within the New England Control Area.

#### 7. Real-Time Demand Reduction Obligation

A Demand Response Resource's Real-Time Demand Reduction Obligation will be calculated for each dispatch interval in which the Demand Response Resource receives a Dispatch Instruction to reduce demand.

#### 7.1 Real-Time Demand Reductions

The Real-Time demand reduction in a dispatch interval is the difference between the adjusted Demand Response Baseline further adjusted for any metered output for a Real-Time Emergency Generation Asset located at the same Retail Delivery Point and the metered demand for each Demand Response Asset associated with the Demand Response Resource.

If a Market Participant receives a Dispatch Instruction for a Demand Response Resource to reduce demand in a dispatch interval by zero MW, then in calculating the Real-Time Demand Reduction Obligation of the Demand Response Resource the Real-Time demand reductions of the Demand Response Assets comprising the resource shall be equal to zero for that dispatch interval.

#### 7.2 Real-Time Demand Reduction Obligations

The Real-Time Demand Reduction Obligation of a Demand Response Resource is the sum of the hourly integrated Real-Time demand reduction amounts of the Demand Response Assets comprising the Demand Response Resource, multiplied by one plus the percent average avoided peak distribution losses. In calculating the Real-Time Demand Reduction Obligation of a Demand Response Resource, the Real-Time demand reduction amounts of the Demand Response Assets comprising the resource shall be as specified in Section III.E2.7.3 below.

If a Market Participant fails to comply with the metering and communication requirements in Section III.E2.2 for a Demand Response Resource for any period of time, then the Real-Time Demand Reduction Obligation shall be zero for that period of time.

#### 7.3 Treatment of Net Supply

If a Demand Response Asset's metered demand represents Net Supply, the Demand Response Asset's metered demand in the interval will be set equal to zero and that value will be used in establishing the Real-Time Demand Reduction Obligation.

#### 8. Demand Response Resource Baseline

A Market Participant must establish a Demand Response Baseline pursuant to Section III.8B prior to submitting a Demand Reduction Offer for a Demand Response Resource.

A Market Participant shall not take actions to create or maintain a Demand Response Baseline that exceeds the expected electricity consumption levels of its end-use metered customers in the absence of demand reduction payments.

#### 9. Energy Market Settlement

#### 9.1 Day-Ahead Settlement

A Market Participant with a Demand Response Resource will be paid for its Day-Ahead Demand Reduction Obligation multiplied by the Day-Ahead LMP for the Dispatch Zone or Node at which the resource is registered.

#### 9.2 Real-Time Settlement

A Market Participant with a Demand Response Resource will be paid or charged for the difference between its Real-Time Demand Reduction Obligation and its Day-Ahead Demand Reduction Obligation multiplied by the hourly Real-Time LMP for the Dispatch Zone or Node at which the resource is registered.

#### 9.3 Cost Allocation

Charges or payments resulting from Real-Time demand reductions produced by Demand Response Resources or Real-Time Emergency Generation Resources shall be allocated on an hourly basis proportionally to Real-Time Load Obligation, excluding the Real-Time Load Obligation incurred at all External Nodes, and excluding Real-Time Load Obligation incurred by Dispatchable Asset Related Demand Postured by the ISO, on a system-wide basis.

#### 9.4 NCPC Credits and Charges

A Market Participant with a Demand Response Resource is eligible for NCPC credits if the resource is following Dispatch Instructions. A Market Participant with a Demand Response Resource is ineligible for NCPC credits and may be assessed NCPC charges if the resource is not operating within the acceptable dispatch tolerance. A resource is not operating within the acceptable dispatch tolerance if in any five-minute interval for an hour the resource is not operating within 10% above or below the resource's Dispatch Instruction, except that a Market Participant with a resource that is not operating within the acceptable dispatch tolerance will not be assessed NCPC charges if during the entire hour the resource operates within 5% above or below the resource's Dispatch Instruction.

#### 10. Average Avoided Peak Distribution Losses

For purposes of Section III.E2, the percent average avoided peak distribution losses shall be the percent average avoided peak transmission and distribution losses used for the associated Capacity Commitment Period in the Forward Capacity Market less the percent average avoided peak transmission system losses.

| 1<br>2<br>3<br>4      |    | UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION     |
|-----------------------|----|--|
| 5<br>6<br>7<br>8<br>9 |    | New England Inc. and ) Docket No. ER13000 OOL Participants Committee )       |
| 10<br>11<br>12<br>13  |    | JOINT TESTIMONY OF HENRY Y. YOSHIMURA<br>AND CHRISTOPHER A. PARENT           |
| 14<br>15<br>16        | I. | "YOSHIMURA-PARENT PRD TESTIMONY" IDENTIFICATION OF WITNESSES                 |
| 17<br>18              | 1. | A. BACKGROUND AND QUALIFICATIONS OF HENRY Y. YOSHIMURA                       |
| 19<br>20              | Q: | Please state your name, title, and business address.                         |
| 21                    | A: | Mr. Yoshimura. My name is Henry Y. Yoshimura. I am the Director of Demand    |
| 22                    |    | Resource Strategy for ISO New England Inc. (the "ISO"), One Sullivan Road,   |
| 23                    |    | Holyoke, Massachusetts 01040-2841.   |
| 24                    |    |  |
| 25                    | Q: | Please summarize your job responsibilities at ISO New England Inc.           |
| 26                    | A: | Mr. Yoshimura. I joined the ISO in 2002. In my current position, I am        |
| 27                    |    | responsible for the development of demand resource initiatives for the New   |
| 28                    |    | England wholesale electricity market and I assist ISO business units in      |
| 29                    |    | implementing these initiatives. I manage the ISO's Demand Resource Strategy  |
| 30                    |    | Department to develop program and market designs that integrate demand       |
| 31                    |    | resources into the wholesale electricity markets, work with the ISO's Market |

<sup>&</sup>lt;sup>1</sup> Capitalized terms used but not defined in this testimony are intended to have the meaning given to such terms in the ISO New England Inc. Transmission, Markets and Services Tariff, FERC Electric Tariff No. 3 ("ISO Tariff"), the Second Restated New England Power Pool Agreement, and the Participants Agreement.

Design group under the direction of Dr. Robert Ethier, the Vice President of Market Development, and work with external and internal stakeholder groups (e.g., program participants, demand resource providers, New England Power Pool ("NEPOOL") Participants, state and Federal regulators, and the ISO's Market and System Operations, Planning, Settlements and IT Departments) to successfully implement such programs and market designs. I also help integrate the ISO's demand resource initiatives with other markets such as the capacity, reserve and regulation markets, and with the ISO's Regional System Planning process in order to ensure efficient market design and consistent planning assumptions.

While at the ISO, I have served on the Board of Directors of the Demand Response Coordinating Committee and the Board of Directors of its successor organization, the Association for Demand Response and Smart Grid ("ADS"). ADS is a nonprofit organization consisting of policymakers, utilities, system operators, technology companies, consumers, and other stakeholders involved in the demand response and smart grid space. ADS facilitates the exchange of ideas, information, and expertise to help its members advance the deployment of demand response and smart grid.

I also serve as the Chair of the Demand Resources Working Group, which is a standing working group of the NEPOOL Markets Committee (the "Markets Committee") that reviews proposed changes to the market rules and the ISO New England Manuals pertaining to demand resources as directed by the Markets

| 1  |    | Committee officers. The Demand Resources Working Group also provides a           |
|----|----|--|
| 2  |    | forum for stakeholders and the ISO to exchange ideas and information on topics   |
| 3  |    | such as: demand resource program implementation, business process                |
| 4  |    | improvements, marketing activities, administrative or operational problems and   |
| 5  |    | issues relating to the participation of demand resources in the wholesale        |
| 6  |    | electricity markets, ISO filings with the Commission concerning demand           |
| 7  |    | resources, and the results of analyses concerning demand resource performance.   |
| 8  |    |  |
| 9  |    | I have appeared before the Federal Energy Regulatory Commission                  |
| 10 |    | ("Commission") on behalf of the ISO on several occasions addressing demand       |
| 11 |    | response in organized electricity markets. Specifically, I appeared before the   |
| 12 |    | Commission in technical conferences on Demand Response in Organized Electric     |
| 13 |    | Markets held on April 23, 2007 in Docket No. AD07-11-000 and May 21, 2008 in     |
| 14 |    | Docket No. AD08-8-000, and concerning the National Action Plan on Demand         |
| 15 |    | Response held on November 19-20, 2009 in Docket No. AD09-10-000. I have          |
| 16 |    | sponsored testimony on demand response topics on behalf of the ISO many times.   |
| 17 |    |  |
| 18 | Q: | Please summarize your experience and qualifications prior to joining the         |
| 19 |    | ISO.   |
| 20 | A: | Mr. Yoshimura. Before joining the ISO, I spent approximately two years in        |
| 21 |    | Jakarta, Indonesia with the Institute of International Education as the Chief of |
| 22 |    | Party of a USAID-sponsored project in which I led and mentored a group of        |
| 23 |    | Indonesian staff to advise and assist the Government of Indonesia to restructure |

| the Indonesian electricity sector and set up appropriate regulatory institutions.    |
|--|
| Before my assignment in Indonesia in 2000, I was a Senior Consultant of              |
| Economics and Public Policy for XENERGY Consulting, Inc., where I managed a          |
| variety of projects related to electric industry restructuring in the United States. |
| Before joining XENERGY in 1997, I was a Senior Consultant with La Capra              |
| Associates, a Boston-based consulting firm specializing in utility regulatory        |
| matters. While with La Capra, I assisted several electric and gas utilities in       |
| evaluating the cost-effectiveness of demand-side management options for              |
| inclusion in their integrated resource plans. I also advised the Massachusetts       |
| Division of Energy Resources ("DOER") in a series of proceedings including the       |
| Massachusetts Department of Public Utilities ("DPU") rulemaking concerning           |
| electric industry restructuring and assisted the DOER in settlement negotiations     |
| with Massachusetts Electric Company ("MECo") concerning the structure of             |
| MECo's restructuring plan, including the structure of the Standard Offer bidding     |
| process. Before joining La Capra Associates in 1992, I served on the staff of the    |
| DPU for about ten years and held several positions including Senior Economist,       |
| Assistant Director of the Electric Power Division, and Director of the Electric      |
| Power Division. As Director of the DPU's Electric Power Division, I managed          |
| staff working in the areas of utility cost of service and rate design, integrated    |
| resource planning, and demand-side management. I participated in the                 |
| development and implementation of numerous regulatory policies such as               |
| marginal cost-based rate design, cost recovery standards for utility generation,     |
| competitive bidding regulations for non-utility generation, integrated resource      |

| 1             |    | management, and the incorporation of environmental externalities in utility      |
|---------------|----|--|
| 2             |    | integrated resource planning.  |
| 3             |    |  |
| 4             |    | I have bachelor and graduate degrees in economics from the University of         |
| 5             |    | Montana. Including my work in graduate school, which was in the energy field, I  |
| 6             |    | have about 30 years of domestic and international experience as an economist and |
| 7             |    | public policy expert in the electric power industry.                             |
| 8             |    |  |
| 9<br>10<br>11 |    | B. BACKGROUND AND QUALIFICATIONS OF CHRISTOPHER A. PARENT                        |
| 12            | Q: | Please state your name, title, and business address.                             |
| 13            | A: | Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market     |
| 14            |    | Development Department at the ISO. My business address is One Sullivan Road,     |
| 15            |    | Holyoke, Massachusetts 01040.  |
| 16<br>17      | Q: | Please summarize your job responsibilities at ISO New England Inc.               |
| 18            | A: | Mr. Parent. I have been with the ISO since July 2004 and have held various       |
| 19            |    | positions within the organization, including Supervisor of Hourly Settlements,   |
| 20            |    | Supervisor of Business Analysis, and Manager of Business Development. I was      |
| 21            |    | also Manager, Quality & Business Process Development reporting to the Chief      |
| 22            |    | Operating Officer until December 2009 when I became the Manager of the           |
| 23            |    | Market Development Department reporting to Dr. Robert Ethier, the Vice           |
| 24            |    | President of Market Development. In my present position, I am responsible for    |
| 25            |    | coordinating the market development work at the ISO. By working closely with     |

| 1  |     | my staff, internal business units and external stakeholders on proposed changes to |
|----|-----|--|
| 2  |     | the market design, I help to ensure that proposed solutions to market issues       |
| 3  |     | address the identified scope efficiently and effectively and that they are fully   |
| 4  |     | vetted through the internal ISO review and external stakeholder processes.         |
| 5  |     |  |
| 6  | Q:  | Please summarize your experience and qualifications prior to joining the           |
| 7  |     | ISO.   |
| 8  | A:  | Mr. Parent. Prior to joining the ISO, I worked for Accenture (formally Andersen    |
| 9  |     | Consulting) as an energy industry consultant. My clients included both energy      |
| 10 |     | trading companies and Independent System Operators and Regional Transmission       |
| 11 |     | Organizations ("ISOs/RTOs"). When working with the ISOs/RTOs, I was                |
| 12 |     | responsible for developing business and technology solutions to implement their    |
| 13 |     | market designs. When working with energy companies, my primary focus was on        |
| 14 |     | developing business and technology solutions to support their trading and back-    |
| 15 |     | office processes.  |
| 16 |     |  |
| 17 |     | I hold a B.S. in Business Administration with a minor in Computer Science from     |
| 18 |     | St. Michael's College in Vermont.  |
| 19 | *** | DUDDOCE COOPE AND DACK COOLIND OF DIDECT TECTIMONY                                 |
| 20 | II. | PURPOSE, SCOPE AND BACKGROUND OF DIRECT TESTIMONY                                  |
| 21 | Q:  | What is the purpose of this testimony?   |
| 22 | A:  | The purpose of this testimony is to explain and provide the rationale for proposed |
| 23 |     | modifications to the price responsive demand full integration ("PRD FI") rules for |
| 24 |     | demand response. The PRD FI period is to begin on June 1, 2017. Until then,        |

price responsive demand in New England is operating under a set of "transition period" rules ("PRD TP") that are currently in place.

- Q: Please summarize the proposed changes.
- The proposed changes make a number of revisions to the baseline calculation
  rules in Section III.8, to the energy market rules for demand response in Appendix
  III.E, and to the Forward Capacity Market rules for demand response in Section
  III.13. The proposed revisions:
  - Clarify that the Demand Reduction Value of a Real-Time Emergency
     Generation Asset can be based on the Average Hourly Load Reduction or the
     Average Hourly Output depending on its metering configuration, and also
     make a number of other ancillary revisions relating to the participation of
     Real-Time Emergency Generation Resources under PRD FI, including
     clarifications regarding required metering equipment, conforming changes to
     the settlement rules for Real-Time Emergency Generation Resources, and
     clarifications regarding the Locational Marginal Price used for Real-Time
     Emergency Generation Resource compensation.
    - Clarify the energy compensation rules for Real-Time Emergency Generation
       Resources under PRD FI.
    - Split the baseline section of the rules (Section III.8) and the energy market rules for demand response (Appendix III.E) into two versions to distinguish the requirements for demand response under the PRD TP rules, which are currently in effect, from the requirements of PRD FI, which are applicable starting on June 1, 2017, and make all the rules effective now.

| 1  | • | Clarify the baseline calculation rules for PRD FI (Section III.8) regarding (1) |
|----|---|---|
| 2  |   | meter data usage in the baseline calculation, (2) the baseline refreshment      |
| 3  |   | criteria, (3) the application of the baseline adjustment, and (4) minor         |
| 4  |   | terminology clarifications.   |
| 5  | • | Clarify the Demand Response Baseline and Real-Time Demand Reduction             |
| 6  |   | calculations for Demand Response Assets that have a Real-Time Emergency         |
| 7  |   | Generation Asset located behind the same Retail Delivery Point.                 |
| 8  | • | Reinstate the application of the avoided transmission loss adjustment to        |
| 9  |   | Demand Resources in the Forward Capacity Market.                                |
| 10 | • | Allow Demand Response Resources to offer on holidays and incorporate the        |
| 11 |   | meter data from holidays into the appropriate Demand Response Baseline day      |
| 12 |   | type.   |
| 13 | • | Clarify how Real-Time Demand Response Resources will be transitioned            |
| 14 |   | from PRD TP to PRD FI.  |
| 15 | • | Make a number of modifications to applicable definitions in Section I.2.2.      |
| 16 | • | Remove references to Critical Peak Demand Resources and Demand Resource         |
| 17 |   | Critical Peak Hours which are no longer applicable.                             |
| 18 | • | Conform the PRD FI Demand Reduction Threshold Price calculations to             |
| 19 |   | mirror the PRD TP Demand Reduction Threshold Price calculations.                |
| 20 | • | Correct minor grammatical, spelling and terminology issues in the baseline      |
| 21 |   | rules (Section III.8) and in the resource availability rules (Section III.13).  |
| 22 |   |   |
|    |   |   |

Please explain the genesis of the proposed changes.

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Q:

| 1  | A: | In response to the Commission's Order No. 745, Demand Response                           |
|----|----|--|
| 2  |    | Compensation in Organized Wholesale Energy Markets, <sup>2</sup> the ISO proposed, and   |
| 3  |    | the Commission accepted, two sets of Tariff revisions to implement price                 |
| 4  |    | responsive demand in New England's wholesale energy market. <sup>3</sup> The two sets of |
| 5  |    | changes provide for a two step implementation of price responsive demand: a              |
| 6  |    | transition period, i.e. PRD TP, which largely continues the use of existing demand       |
| 7  |    | response programs, leading up to the full integration of demand response in the          |
| 8  |    | energy market, i.e., PRD FI. Additional changes were then filed to conform the           |
| 9  |    | Forward Capacity Market rules to the PRD TP rules and the PRD FI rules.                  |
| 10 |    |  |
| 11 |    | Following the development of these changes, the ISO performed a review of the            |
| 12 |    | various revisions for both the transition period and for full integration, and           |
| 13 |    | identified a number of additional clarifying changes. Clarifying changes for the         |
| 14 |    | PRD TP rules were filed, and accepted by the Commission on May 29, 2012 in               |
| 15 |    | Docket No. ER12-1550-000.  |
| 16 |    |  |
| 17 |    | Several of the clarifying changes identified in the PRD TP rules accepted by the         |
| 18 |    | Commission are also required in the PRD FI energy market rules and baseline              |
| 19 |    | calculation rules, and several additional clarifications to the PRD FI capacity          |
| 20 |    | market rules are also being proposed. These modifications have been                      |

<sup>&</sup>lt;sup>2</sup> FERC, Demand Response Compensation in Organized Wholesale Energy Markets, Order 745, Docket No. RM10-17-000 (March 15, 2011), <a href="http://www.ferc.gov/EventCalendar/Files/20110315105757-RM10-17-000.pdf">http://www.ferc.gov/EventCalendar/Files/20110315105757-RM10-17-000.pdf</a>.

<sup>&</sup>lt;sup>3</sup> *ISO New England Inc.*, Order No. 745 Compliance Filing, Docket No. ER11-4336-000 (August 19, 2011); <a href="http://www.iso-ne.com/regulatory/ferc/filings/2011/aug/er11">http://www.iso-ne.com/regulatory/ferc/filings/2011/aug/er11</a> 4336 000 prd filing.pdf

| 1   |      | consolidated into this filing.   |
|-----|------|--|
| 2 3 | III. | EXPLANATION OF PROPOSED TARIFF CHANGES.  |
| 4   |      | a. CLARIFICATIONS TO THE DEMAND REDUCTION VALUE                                      |
| 5   |      | CALCULATION RULES FOR REAL-TIME EMERGENCY  |
| 6   |      | GENERATION RESOURCES AND OTHER ANCILLARY CHANGES                                     |
| 7   |      | FOR REAL-TIME EMERGENCY GENERATION RESOURCES IN PRD                                  |
| 8   |      | FI   |
| 9   | Q:   | Please explain the market rule changes to clarify the Demand Reduction               |
| 10  |      | Value calculations for Real-Time Emergency Generation Resources.                     |
| 11  | A:   | The Demand Reduction Value ("DRV") is the quantity of reduced demand                 |
| 12  |      | produced by a Demand Resource as measured at the resource's meter. For a             |
| 13  |      | Demand Resource comprising of an aggregation of more than one asset, the DRV         |
| 14  |      | of the resource is the sum of the DRVs of the individual assets that are part of the |
| 15  |      | resource – thus, the DRV of a Real-Time Emergency Generation Resource is the         |
| 16  |      | sum of the DRVs of the individual Real-Time Emergency Generation Assets              |
| 17  |      | comprising the resource. Under the current Forward Capacity Market rules that        |
| 18  |      | are applicable during the PRD TP, the DRV of a Real-Time Emergency                   |
| 19  |      | Generation Asset can be established in one of two ways. First, the DRV can be        |
| 20  |      | established by directly metering the output of the emergency generator to            |
| 21  |      | compute the asset's Average Hourly Output. Under this first method, it is            |
| 22  |      | assumed that the output of the emergency generator supplies the electrical load      |
| 23  |      | that would have otherwise been consumed from the wholesale power grid.               |
| 24  |      | Second, the DRV of a Real-Time Emergency Generation Asset can be established         |

| 1  |    | by measuring the reduction in customer energy demand at the end-use customer     |
|----|----|--|
| 2  |    | meter to determine the asset's Average Hourly Load Reduction.                    |
| 3  |    |  |
| 4  |    | The Average Hourly Output methodology is permitted for Real-Time Emergency       |
| 5  |    | Generation Assets participating under the PRD FI rules. However, there is no     |
| 6  |    | reason why a Real-Time Emergency Generation Asset should not also be able to     |
| 7  |    | utilize the Average Hourly Load Reduction methodology for calculating its DRV    |
| 8  |    | value under the PRD FI rules. To permit a Real-Time Emergency Generation         |
| 9  |    | Asset to establish an Average Hourly Load Reduction, a Demand Response           |
| 10 |    | Baseline is required. Accordingly, Section III.8B, which governs the computation |
| 11 |    | of Demand Response Baselines under PRD FI, is being revised to allow the DRV     |
| 12 |    | of a Real-Time Emergency Generation Asset to be established using the Average    |
| 13 |    | Hourly Load Reduction methodology as measured at the Retail Delivery Point.      |
| 14 |    |  |
| 15 | Q: | Are any restrictions in the DRV calculation for Real-Time Emergency              |
| 16 |    | Generation Assets necessary under PRD FI?  |
| 17 | A: | Yes. A Real-Time Emergency Generation Asset's use of either method (i.e.,        |
| 18 |    | Average Hourly Output or Average Hourly Load Reduction) to determine its         |
| 19 |    | DRV should be restricted based upon the meter configuration of the Real-Time     |
| 20 |    | Emergency Generation Asset and on the presence of any Demand Response            |
| 21 |    | Assets at the same Retail Delivery Point. These meter configurations and how     |
| 22 |    | they impact the DRV calculation approach of the associated Real-Time             |
| 23 |    | Emergency Generation Asset are explained below:                                  |

Delivery Point as the Real-Time Emergency Generation Asset and Real-Time Emergency Generation Asset can operate synchronized to the grid, then both the Retail Delivery Point and the generator output must be metered. These data are needed because any net supply that is provided to the system, which occurs when the Real-Time Emergency Generation Asset's output exceeds the facility load, should not be credited with the average transmission and distribution loss adjustment. The net supply can only be determined at the Retail Delivery Point meter, and the associated Real-Time Emergency Generation Asset's DRV must be established using the Average Hourly Load Reduction.

- Point as the Real-Time Emergency Generation Asset, then both the Retail Delivery Point and the generator output must be metered, because the ISO needs to know the output of the Real-Time Emergency Generation Asset and the output at the Retail Delivery Point to ensure that all assets have their performance properly calculated and to ensure that the same performance is not counted for both assets (*i.e.*, ensure no double counting of reductions). In this case, the associated Real-Time Emergency Generation Asset's DRV must be established using the Average Hourly Output methodology, derived from the associated Real-Time Emergency Generation Asset's metered output.
- If there are no Demand Response Assets located at the same Retail Delivery

  Point as the Real-Time Emergency Generation Asset and the Real-Time

Emergency Generation Asset cannot operate synchronized to the grid, then either the Retail Delivery Point or the generator output can be metered, since metering either point will allow for an equivalent DRV to be computed. In this case, the associated Real-Time Emergency Generation Asset's DRV can be established using the Average Hourly Output when the generator output is metered or Average Hourly Load Reduction when the Retail Delivery Point is metered. In the proposed Tariff revisions, the restrictions we explain directly above are

reflected in the revisions to Section III.13.1.4.3.2.

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#### Q: Please explain the requirements placed upon Real-Time Emergency Generation Asset metering equipment as part of these changes.

Under the proposed revisions for PRD FI, Market Participants with Real-Time Emergency Generation Assets must utilize a remote terminal unit for receipt of Dispatch Instructions from the ISO, and communicate telemetry in near real-time at an interval of five-minutes or less. The interval meter must have an accuracy of  $\pm 0.5\%$  if it is the same meter used by the distribution company for billing purposes (revenue quality meter), or if the meter is a non-revenue quality meter, the overall accuracy must be  $\pm 2.0\%$ . In addition, these meters are subject to periodic testing and calibration and the records of any meter audit testing and calibration are subject to ISO audit.

22

| 1  | Q: | Why are the changes to metering equipment requirements for Real-Time                |
|----|----|---|
| 2  |    | Emergency Generation Assets being proposed?   |
| 3  | A: | These changes codify the ISO's current metering requirements, which are defined     |
| 4  |    | in the ISO New England manuals, but were never directly specified in the Tariff.    |
| 5  |    | These requirements are not new for Real-Time Emergency Generation Assets and        |
| 6  |    | are consistent with the existing provisions in place for Real-Time Demand           |
| 7  |    | Response Assets pursuant to Appendix III.E1.2.                                      |
| 8  |    |   |
| 9  | Q: | Please explain the conforming changes made to the energy settlement for             |
| 10 |    | Real-Time Emergency Generation Resources under PRD FI.                              |
| 11 | A: | Because of the clarifications made in Section III.8B and III.13.1.4.3.2 to permit   |
| 12 |    | the use of both DRV calculation methodologies for Real-Time Emergency               |
| 13 |    | Generation Assets, a conforming change must also be made in Section                 |
| 14 |    | III.13.1.4.3.2 and in Section III.13.7.2.5.4 so that the settlement rules           |
| 15 |    | appropriately reflect that Real-Time Emergency Generation Assets can have their     |
| 16 |    | DRV calculated based upon a demand reduction (i.e., Average Hourly Load             |
| 17 |    | Reduction) or metered output (i.e., Average Hourly Output).                         |
| 18 |    |   |
| 19 |    | In Section III.13.7.2.5.4, the ISO is also clarifying the Locational Marginal Price |
| 20 |    | that is to be used to compensate Real-Time Emergency Generation Resources.          |
| 21 |    | Under PRD TP, the Real-Time LMP is not calculated for Dispatch Zones because        |
| 22 |    | demand response is not being dispatched through the Real-Time Energy Market.        |
| 23 |    | Under the PRD TP, the ISO uses the associated Load Zone LMP to compensate           |

| 1  |            | all demand response for energy. However, under PRD FI, demand response   |
|--|------------|--|
| 2  |            | providers will submit Demand Reduction Offers in the Day-Ahead Energy Market   |
| 3  |            | and Demand Response Resources will be dispatchable in the Real-Time Energy   |
| 4  |            | Market at a Dispatch Zone level. Therefore, the ISO will begin to calculate LMPs   |
| 5  |            | for the Dispatch Zones commencing in June 2017.  |
| 6  |            |  |
| 7  |            | Since Real-Time Emergency Generation Resources are associated with a Dispatch  |
| 8  |            | Zone, Section III.13.7.2.5.4 is being revised to clarify that the Real-Time LMP  |
| 9  |            | calculated at the Dispatch Zone will be used to compensate Real-Time   |
| 10   |            | Emergency Generation Resources. Using the LMP at the Dispatch Zone is a more   |
| 11   |            | reflective price to compensate the resource relative to its location.  |
| 10   |            |  |
| 12   |            |  |
| 12   |            | b. SPLITTING SECTION III.8 AND APPENDIX III.E  |
|  | Q:         | b. SPLITTING SECTION III.8 AND APPENDIX III.E  Please explain why the ISO proposes to split Section III.8 and Appendix   |
| 13   | Q:         |  |
| 13<br>14                                     | <b>Q</b> : | Please explain why the ISO proposes to split Section III.8 and Appendix  |
| <ul><li>13</li><li>14</li><li>15</li></ul>   |            | Please explain why the ISO proposes to split Section III.8 and Appendix III.E.   |
| 13<br>14<br>15<br>16                         |            | Please explain why the ISO proposes to split Section III.8 and Appendix III.E.  Section III.8 contains the market rules for the Demand Response Baseline   |
| 13<br>14<br>15<br>16<br>17                   |            | Please explain why the ISO proposes to split Section III.8 and Appendix III.E.  Section III.8 contains the market rules for the Demand Response Baseline calculation method, and Appendix III.E contains the energy market rules for price   |
| 13<br>14<br>15<br>16<br>17                   |            | Please explain why the ISO proposes to split Section III.8 and Appendix III.E.  Section III.8 contains the market rules for the Demand Response Baseline calculation method, and Appendix III.E contains the energy market rules for price responsive demand. The PRD TP and PRD FI versions of Section III.8 and  |
| 13<br>14<br>15<br>16<br>17<br>18             |            | Please explain why the ISO proposes to split Section III.8 and Appendix III.E.  Section III.8 contains the market rules for the Demand Response Baseline calculation method, and Appendix III.E contains the energy market rules for price responsive demand. The PRD TP and PRD FI versions of Section III.8 and Appendix III.E have been accepted by the Commission with different effective   |
| 13<br>14<br>15<br>16<br>17<br>18<br>19<br>20 |            | Please explain why the ISO proposes to split Section III.8 and Appendix III.E.  Section III.8 contains the market rules for the Demand Response Baseline calculation method, and Appendix III.E contains the energy market rules for price responsive demand. The PRD TP and PRD FI versions of Section III.8 and Appendix III.E have been accepted by the Commission with different effective dates. As the effort on this series of market rule changes commenced, the ISO |

they are now qualifying and formulating Forward Capacity Auction offers and bids. Since participating in Forward Capacity Auctions for Capacity

Commitment Periods when PRD FI will be in effect is informed by understanding the baseline and energy market performance requirements that will be in effect under PRD FI, the proposed market rule changes make both the PRD TP and the PRD FI versions of Section III.8 and Appendix III.E effective now. These two versions (Section III.8A and Section III.8B, and Appendix III.E1 and Appendix III.E2) are annotated to indicate the Capacity Commitment Periods to which each version applies (*i.e.*, the Capacity Commitment Periods during the PRD TP, and the Capacity Commitment Periods once PRD FI becomes effective on June 1, 2017).

Q:

A:

#### c. CLARIFICATIONS TO THE BASELINE CALCULATION RULES

You note that the proposed modifications include changes to the Demand Response Baseline calculation rules. Do these modifications change the methodology used to compute Demand Response Baselines?

No. The ISO proposes no changes to the Demand Response Baseline calculation methodology. The ISO is making clarifications to the baseline rules that will apply during PRD FI, so that the rules more clearly explain the calculation methodology. The proposed rule changes parallel the changes that the ISO has already proposed and the Commission accepted for the PRD TP on May 29, 2012 in Docket No. ER12-1550-000.

| 1              | Q: | Please summarize the proposed clarifications to the baseline calculation  |
|----------------|----|---|
| 2              |    | rules.  |
| 3              | A: | The ISO is proposing clarifications to the following aspects of the baseline  |
| 4              |    | calculation rules:  |
| 5<br>6<br>7    |    | 1. The use of meter data in the computation of an asset's Demand Response Baseline when the Demand Response Resource or Real-Time Emergency Generation Resource to which the asset is associated is dispatched. |
| 8<br>9         |    | 2. The application of the "seven of the prior 10 day" baseline refreshment criterion for assets reducing demand in response to a Dispatch Instruction.  |
| 10<br>11<br>12 |    | 3. The application of the baseline adjustment to Real-Time Emergency Generation Assets interrupting demand in response to a capacity audit or when dispatched during a capacity deficiency.                     |
| 13<br>14       |    | 4. The use of the terms "prior day," "present day" and "next day" in the baseline calculations.   |
| 15             |    |   |
| 16             | Q: | Please explain the clarifications concerning the use of meter data in the   |
| 17             |    | computation of an asset's demand response baseline.   |
| 18             | A: | Section III.8B.4 describes the determination of the next day's Demand Response  |
| 19             |    | Baseline in terms of whether the present day's meter data should be incorporated  |
| 20             |    | in the next day's baseline of the same day type. The intent of Section III.8B.4 is  |
| 21             |    | to exclude from the baseline calculation meter data from days when a Demand   |
| 22             |    | Response Asset is reducing demand.  |
| 23             |    |   |
| 24             |    | Section III.8B.4 excludes a day from the baseline calculation if a Demand   |
| 25             |    | Response Resource is dispatched based upon price in that day. However,  |
| 26             |    | Demand Response Resources and Real-Time Emergency Generation Resources  |
| 27             |    | can also be dispatched for a capacity audit, and a Real-Time Emergency  |

Generation Resource also can be dispatched for a capacity deficiency. As a result, Section III.8B.4 is being revised to clarify that (subject to the "seven of the prior 10 day" exception), a day will be excluded from the baseline calculation if the resource was either dispatched for energy or dispatched for an audit on that day. For Real-Time Emergency Generation Resources, the clarification includes excluding a day when the dispatch was for a capacity deficiency. Furthermore, the current version of Section III.8B does not cover baseline calculations for Real-Time Emergency Generation Assets that are metered at the Retail Delivery Point and have a baseline. The baseline is required for a Real-Time Emergency Generation Asset because it is used to calculate the Average Hourly Load Reduction discussed earlier in the testimony. This exclusion is being corrected in this filing by the addition of the words "Real-Time Emergency Generation Asset" in the appropriate places to make clear that the calculation applies to these assets. What is the "seven of the prior 10 day" exception that you mention above for

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### Q: the baseline calculation rules?

As we explained above, typically, the baseline of a Demand Response Asset and a Real-Time Emergency Generation Asset should *not* be computed using meter data on the days in which the resources to which these assets are associated are dispatched for a capacity audit or when a Real-Time Emergency Generation Resource to which the Real-Time Emergency Generation Asset is associated is

dispatched for a capacity deficiency. However, the baseline calculation rules in Section III.8B.4 reduce baseline bias by requiring that the calculated baseline be periodically refreshed with contemporary meter data. If more than seven days of the last 10 days of the same day type were excluded from the computation of the Demand Response Baseline for an asset (which would usually occur because the resource to which the asset is associated had been interrupted on the excluded days),<sup>4</sup> then the meter data of the present day would be used to compute the Demand Response Baseline of that asset for the next day of the same day type *even if* the asset interrupted its demand in the present day. The seven of the prior 10 day baseline refreshment criterion reduces baseline bias that results from a baseline that does not include more recent data.

A:

Q: Please explain the modifications made to the market rules concerning the application of the "seven of the prior 10 day" baseline refreshment criterion.

These proposed changes clarify that the seven of the prior 10 day baseline refreshment criterion apply to assets that are part of a resource that interrupts demand pursuant to the PRD FI rules for the energy market and pursuant to the capacity market rules. The exclusion of meter data from the baseline computation, for more than seven of the prior 10 days of the same day type, results in baseline bias *regardless* of why the resource was reducing demand. The seven of the prior 10 day baseline refreshment guarantees that the baseline includes contemporary data at all times. This refreshment methodology avoids

<sup>&</sup>lt;sup>4</sup> This formulation is equivalent to: if *less than three of the last 10 days* of the same day type (i.e., non-Demand Response Holiday weekdays, Saturdays, or Sundays including Demand Response Holidays) were *included* in the computation of the Demand Response Baseline for an asset.

the problem of the baseline becoming frozen and was accepted by the
Commission on January 19, 2012.<sup>5</sup>

O:

A:

Please explain the clarifications made to the application of the baseline adjustment to Real-Time Emergency Generation Assets interrupting demand in response to a capacity audit or a capacity deficiency.

The Demand Response Baseline is an estimate of an asset's energy demand for each interval of the current Operating Day based on meter data from previous Operating Days absent a Dispatch Instruction to reduce demand. However, conditions that affect energy demand in the current Operating Day may vary from the conditions affecting demand on previous Operating Days from which meter data were used to compute the baseline. To account for these normal day-to-day variations, baselines computed as averages of interval meter data from previous days are adjusted to reflect conditions during the Operating Day.

The Demand Response Baseline adjustment should be performed for each day on which a Real-Time Emergency Generation Resource is dispatched under the market rules. However, the market rule in its current form does not appear to apply the baseline adjustment to Real-Time Emergency Generation Assets associated to a Real-Time Emergency Generation Resource that is interrupting in response to a capacity audit or a capacity deficiency. The proposed changes clarify that the baseline adjustment to Real-Time Emergency Generation Assets

<sup>&</sup>lt;sup>5</sup> ISO New England Inc., 138 FERC ¶ 61,042 (January 19, 2012) at P 34.

applies any time that the Real-Time Emergency Generation Asset is dispatched by the ISO. Not making these clarifications would result in a change from the current practice during the PRD TP of symmetrically adjusting the baselines of Real-Time Emergency Generation Assets associated with Real-Time Emergency Generation Resources dispatched in the Operating Day.

Accordingly, Section III.8B.5 of Market Rule 1 is being clarified to ensure that the baseline adjustment is applied to Real-Time Emergency Generation Assets whenever they are dispatched for a capacity audit or a capacity deficiency. The clarification also explains that the start of the adjustment period is 2.5 hours prior to the start of the first interruption interval in the Operating Day, which provides for a reasonable period of time during which to measure normal consumption activity for the day, and is consistent with the way in which the adjustment is currently implemented as specified in Section III.8A.4. In addition, the total amount of the adjustment must be between zero and the facility's Maximum Load.

A:

# Q: Why is the total amount of the adjustment being limited to between zero and the facility's Maximum Load?

The capping of the total amount of the adjustment is a function of the treatment of net supply under PRD FI. The maximum of the adjusted baseline should not exceed the facility's previously observed annual non-coincident peak demand

| 1                               |    | (i.e., its Maximum Load) – otherwise, the adjusted baseline would likely over-              |
|---------------------------------|----|---|
| 2                               |    | estimate the facility's normal consumption level.   |
| 3                               |    |   |
| 4                               |    | The adjusted baseline of a Real-Time Emergency Generation Asset should not be               |
| 5                               |    | less than zero since these assets are normally off prior to dispatch in response to         |
| 6                               |    | Real-Time Emergency Generation Event Hours. If the asset happened to be on, it              |
| 7                               |    | would be because of a power outage or unit test, both of which do not reflect               |
| 8                               |    | normal operating condition of the asset. Allowing the adjusted baseline of a Real           |
| 9                               |    | Time Emergency Generation Asset to be less than zero would result in a Demand               |
| 10                              |    | Response Baseline that is too low, which would result in an underestimate of the            |
| 11                              |    | asset's performance during Real-Time Emergency Generation Event Hours.                      |
| 12                              |    |   |
| 13                              | Q: | Please explain the clarifications made to the baseline calculation rules with               |
| 14                              |    | respect to the use of the terms "prior day," "present day," and "next day" in               |
| 15                              |    | the baseline calculations.  |
| 16                              | A: | The PRD FI rules use the terms "prior day," "present day," and "next day"                   |
| 17                              |    | inconsistently, and the baseline calculation rules in Section III.8B are being              |
| 18                              |    | clarified to remove these inconsistencies. <i>Prior day</i> meter data is used to compute   |
| 19                              |    | the baseline for the <i>present day</i> of the same day type. Whether the participating     |
| 20                              |    | asset interrupts its demand in the present day pursuant to the energy or capacity           |
|                                 |    |   |
| 21                              |    | market rules affects the baseline computation for the <i>next day</i> of the same day       |
| <ul><li>21</li><li>22</li></ul> |    | market rules affects the baseline computation for the <i>next day</i> of the same day type. |

| 1  |    | Since the market rules do not use these terms consistently with respect to meter |
|----|----|--|
| 2  |    | data, the edits being proposed ensure consistent use of the words "prior day,"   |
| 3  |    | "present day," and "next day." These changes parallel changes that the           |
| 4  |    | Commission accepted for the PRD TP in Docket No. ER12-1550-000.                  |
| 5  |    |  |
| 6  |    | d. CLARIFY THE DEMAND RESPONSE BASELINE AND REAL-TIME                            |
| 7  |    | DEMAND REDUCTION CALCULATIONS FOR DEMAND   |
| 8  |    | RESPONSE ASSETS  |
| 9  | Q: | Please explain why clarifications are required to the baseline calculation and   |
| 10 |    | Real-Time demand reduction rules for Demand Response Assets with a Real          |
| 11 |    | Time Emergency Generation Asset behind the same Retail Delivery Point.           |
| 12 | A: | Currently, Appendix III.E2.7.3 of the PRD FI energy market rules includes an     |
| 13 |    | adjustment "to the metered demand measured at the retail delivery point in the   |
| 14 |    | same intervals for purposes of determining: (a) a Demand Response Asset's        |
| 15 |    | Demand Response Baseline, and; (b) the Real-Time demand reduction achieved       |
| 16 |    | by the individual end-use customer facility that comprises the Demand Response   |
| 17 |    | Asset" when there is a Real-Time Emergency Generation Asset located behind       |
| 18 |    | the same Retail Delivery Point as a Demand Response Asset that is being          |
| 19 |    | dispatched. This provision is intended to prevent double counting the same       |
| 20 |    | performance on the Demand Response Asset and the Real-Time Emergency             |
| 21 |    | Generation Asset.  |
|    |    |  |

The ISO has identified two concerns with this adjustment: (1) under the current language the adjustment only applies when the ISO specifically dispatches the Real-Time Emergency Generation Asset and is not applied when the Real-Time Emergency Generation Asset is operating for other reasons (e.g., a test of the generator, a power outage at the facility), which can impact the accuracy of the baseline and measurement of the demand reduction; and (2) an aspect of this adjustment is better included in the Demand Response Baseline (Section III.8B) rather than in the Real-Time Demand Reduction (Section III.E2.7.3) section of the Tariff.

A:

Q: Please explain the clarifications to the baseline calculation rules that are being proposed to address these two concerns.

The ISO proposes to move the adjustment language from Section III.E2.7.3 to Section III.8B.1.1, and further to clarify the adjustment language so that the metered demand at the Retail Delivery Point of the Demand Response Asset is adjusted to remove any impact of a Real-Time Emergency Generation Asset's metered output. By excluding, at all times, the Real-Time Emergency Generation Asset metered output and not only when the Real-Time Emergency Generation Asset is dispatched, the Demand Response Baseline of the Demand Response Asset is not understated by the output of the Real-Time Emergency Generation Asset.

| 1  | Q: | You have explained the clarifications to the baseline rules for Demand            |
|----|----|---|
| 2  |    | Response Assets that have a Real-Time Emergency Generation Asset behind           |
| 3  |    | the same Retail Delivery Point. You mention above that you are also making        |
| 4  |    | changes to the Real-Time demand reduction calculation rules for these             |
| 5  |    | assets. Can you please explain these?   |
| 6  | A: | An analogous modification is being made to Appendix III.E2.7.1 to remove any      |
| 7  |    | impact that the Real-Time Emergency Generation Asset's metered output has on      |
| 8  |    | the determination of the Real-Time Demand Reduction Obligation of the Demand      |
| 9  |    | Response Asset. Excluding at all times the Real-Time Emergency Generation         |
| 10 |    | Asset's metered output (and not only when the Real-Time Emergency Generation      |
| 11 |    | Resource associated with the asset is dispatched), removes entirely the impact of |
| 12 |    | the behavior of the Real-Time Emergency Generation Asset on the Real-Time         |
| 13 |    | Demand Reduction Obligation of the Demand Response Asset, and therefore           |
| 14 |    | carries through the intent to prevent double counting. This helps avoid the       |
| 15 |    | potential of improperly counting the same performance on both the Demand          |
| 16 |    | Response Asset and the Real-Time Emergency Generation Asset.                      |
| 17 |    |   |
| 18 |    | e. REINSTATING THE ADJUSTMENT FOR TRANSMISSION LOSSES                             |
| 19 | Q: | Please explain the changes to reinstate the adjustment for transmission losses    |
| 20 |    | for demand response participating in PRD FI.                                      |
| 21 | A: | Under Section III.13.7.1.5.1 of the Forward Capacity Market rules, the Capacity   |
| 22 |    | Value of a Demand Resource is calculated as its Demand Reduction Value for the    |
| 23 |    | month multiplied by one plus the percent average avoided peak transmission and    |

distribution losses used to calculate the Installed Capacity Requirement for the Forward Capacity Auction immediately preceding the Forward Capacity Auction in which the Demand Resource clears. In the April 26 Filing on the PRD FI.6 the ISO proposed to remove the transmission loss adjustment (but not the adjustment for distribution losses) for Demand Resource Capacity Values in the FCM. The ISO's proposal was based on a view that the capacity and energy market models should be the same. However, the ISO reevaluated this issue after submitting the April 26 Filing (and before the Commission issued its order on that filing on January 14, 2013)<sup>7</sup> and determined that it was appropriate to reinstate the adjustment for the capacity market.

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#### 0: What is the basis for reinstating the transmission loss adjustment for demand resources for the capacity market?

The modeling for the capacity and energy markets is different, and the crediting of avoided losses to Demand Resources between the two markets should likewise be different. In the energy market, transmission losses on the wholesale transmission system are incorporated into the real-time dispatch and each LMP. In the capacity market, however, there is a single price for an entire Capacity Zone and transmission losses are not assessed based on a resource's actual point of injection or point of withdrawal. Rather, transmission losses are incorporated into the capacity market by increasing the Installed Capacity Requirement

<sup>&</sup>lt;sup>6</sup> ISO New England Inc., Docket No. ER12-1627-000, Market Rule 1 Price Responsive Demand FCM Conforming Changes for Full Integration (April 26, 2012) ("April 26 Filing").

<sup>&</sup>lt;sup>7</sup> See ISO New England Inc., 142 FERC ¶ 61,027 (January 14, 2013) at P 56.

("ICR") by the average amount of transmission losses experienced on the wholesale transmission system.

A:

## 4 Q: How do transmission losses impact the determination of the Installed

#### **Capacity Requirement?**

We will explain first how losses are accounted for in the determination of the Installed Capacity Requirement ("ICR"). The ICR views the transmission system as consisting of a cloud of generation with the entire load connected to the cloud through a single transmission line of infinite capacity. The load is in a separate cloud at the opposite end of the transmission line. This approach makes the simplifying assumption that all generators in the cloud contribute the same average transmission loss calculated as a percentage. No specific losses are calculated for a particular generator regardless of the generator's actual location or distance from the load being served. The outcome of this assumption is that the ICR must be higher than the projected load on the transmission system so that sufficient generation is procured to serve load and to overcome losses on the transmission system.<sup>8</sup> As a result, each MW of generation is treated equally in the FCA.

## Q: How are Demand Resources different than generation resources in meeting

**ICR?** 

<sup>&</sup>lt;sup>8</sup> The actual ICR must exceed the projected load by more than just transmission losses to account for the potential unavailability of resources and the need for reserves.

The ICR assumes that the region's capacity needs are being met by generation resources; however, Demand Resources are also capable of providing capacity to meet ICR. Unlike generation resources, Demand Resources are located in the load cloud not the generation cloud. As a result, Demand Resources have the opposite effect on losses -i.e., whereas increasing generation tends to increase losses on average, increasing demand response (i.e., reducing load) tends to decrease losses on average. Therefore, one MW of load reduction produced by a Demand Resource as measured at the customer meter avoids more than one MW of generation given that load reductions avoid both distribution and transmission system losses. Therefore, to mathematically move the Demand Resource to the generation cloud, (i.e., make Demand Resources equivalent to generation to participate in the FCM as a capacity resource), it is appropriate to increase the Demand Resource's load reductions by the historic average transmission losses. In addition, since Demand Resources are generally not connected directly to the transmission system, but rather through the local distribution system, the capacity of a Demand Resource is increased by an additional adjustment reflecting historic average distribution losses. For these reasons, the ISO is proposing to add the average transmission loss adjustment to the average distribution losses for determining the amount of

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capacity that a Demand Resource is capable of providing in the FCM to meet

| 1  |    | f. ALLOW DEMAND RESPONSE RESOURCES TO OFFER ON                                   |
|----|----|--|
| 2  |    | HOLIDAYS AND INCORPORATE THE METER DATA FROM                                     |
| 3  |    | HOLIDAYS INTO THE APPROPRIATE DEMAND RESPONSE                                    |
| 4  |    | BASELINE DAY TYPE  |
| 5  | Q. | Please explain the elimination of the exclusion that prohibits submitting        |
| 6  |    | Demand Response Offers on ISO settlement holidays.                               |
| 7  | A. | Appendix III.E2 for PRD FI states that Demand Response Resources are not         |
| 8  |    | allowed to offer into the energy market on ISO settlement holidays, which makes  |
| 9  |    | these resources unavailable for dispatch on these holidays. This exclusion is    |
| 10 |    | inconsistent with the requirement that Demand Response Capacity Resources        |
| 11 |    | with a Capacity Supply Obligation meet their obligation through their associated |
| 12 |    | Demand Response Resources, which must offer their capability into the energy     |
| 13 |    | market each day. Demand Response Resources would be penalized as                 |
| 14 |    | unavailable if a Forward Capacity Market Shortage Event pursuant to Section      |
| 15 |    | III.13.7 were to occur on an ISO settlement holiday. The ISO is proposing to     |
| 16 |    | eliminate this exclusion, so that Demand Response Resources are able to offer    |
| 17 |    | into the Day-Ahead Energy Market and Real-Time Energy Market every day,          |
| 18 |    | including ISO settlement holidays, and subsequently be available to the ISO for  |
| 19 |    | dispatch.  |
| 20 |    |  |
| 21 |    | Removing this exclusion requires two additional changes to ensure Demand         |
| 22 |    | Response Baselines are accurately calculated. The ISO is proposing to modify     |
| 23 |    | Section III.8B (1) to include ISO settlement holidays that are not Demand        |

| 1  |    | Response Holidays in the weekday non-Demand Response Holiday baseline day        |
|----|----|--|
| 2  |    | type and (2) include Demand Response Holidays in the Sunday baseline day type.   |
| 3  |    |  |
| 4  | Q. | Please explain the difference between ISO settlement holidays and Demand         |
| 5  |    | Response Holidays.   |
| 6  | A. | ISO settlement holidays represent ISO non-business days. These days impact the   |
| 7  |    | meter data submission deadlines, and the ISO settlement and bill issuance        |
| 8  |    | procedures. The ISO settlement holidays include: New Year's Day, Martin          |
| 9  |    | Luther King Day, President's Day, Good Friday, Patriot's Day (Massachusetts      |
| 10 |    | and Maine holiday), Memorial Day, Independence Day, Labor Day, Columbus          |
| 11 |    | Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving Day, and        |
| 12 |    | Christmas Day. The date of these holidays is the observed date, which means that |
| 13 |    | when the holiday falls on a weekend, the holiday is celebrated on the Friday     |
| 14 |    | before or the Monday after.  |
| 15 |    |  |
| 16 |    | Demand Response Holidays are holidays that Demand Response Assets would          |
| 17 |    | typically be expected to be shut down. Demand Response Holidays are typically    |
| 18 |    | used in the market rules to indicate days on which a resource is typically not   |
| 19 |    | available for dispatch, and from which meter data will be excluded from the      |
| 20 |    | baseline calculations. Demand Response Holidays include New Year's Day,          |
| 21 |    | Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving           |
| 22 |    | Day, and Christmas Day. Again, the date of these holidays is the observed date,  |

| 1  |    | which means that when the holiday falls on a weekend, the holiday is celebrated  |
|----|----|--|
| 2  |    | on the Friday before or the Monday after.  |
| 3  |    |  |
| 4  | Q. | Please explain why the ISO is proposing to include ISO settlement holidays       |
| 5  |    | that are not Demand Response Holidays in the non-holiday weekday baseline        |
| 6  |    | type.  |
| 7  | A: | The days that are ISO settlement holidays that are not Demand Response           |
| 8  |    | Holidays are Martin Luther King Day, President's Day, Good Friday, Patriot's     |
| 9  |    | Day (Massachusetts and Maine holiday), Columbus Day, and the day after           |
| 10 |    | Thanksgiving Day.  |
| 11 |    |  |
| 12 |    | ISO settlement holidays that are not Demand Response Holidays are better         |
| 13 |    | included within the non-holiday weekday baseline day type rather than the        |
| 14 |    | Saturday or Sunday baseline type, because the loads of the Demand Response       |
| 15 |    | Assets on these days are more similar to that of other non-holiday weekdays.     |
| 16 |    |  |
| 17 | Q. | Please explain why the ISO is proposing to include Demand Response               |
| 18 |    | Holidays in the Sunday baseline day type.  |
| 19 | A. | Demand Response Holidays represent days when a typical Demand Response           |
| 20 |    | customer would not be operating at their normal level, and in many cases will be |
| 21 |    | shut down. For example, it is reasonable to expect that the typical commercial   |
| 22 |    | customer will not be operating on New Year's Day or Christmas. An analysis of    |
| 23 |    | Demand Response Assets' demand on Demand Response Holidays showed that           |

these loads are less similar in shape to a normal weekday and in fact are more closely comparable to their Sunday consumption. Therefore, the ISO is proposing to use the Sunday day type for Demand Response Holidays regardless of what day of the week the holiday falls.

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## g. CLARIFYING THE TRANSITION FROM PRD TP TO PRD FI

- Q. Please explain the clarifications made with regard to the transition from PRD TP to PRD FI.
- 9 Demand Response Capacity Resources and Demand Response Resources are A. 10 resource categories that will apply for the Capacity Commitment Period 11 commencing June 1, 2017. At that time, Real-Time Demand Response Resources 12 will no longer be utilized in the markets. However, the assets underlying the 13 Real-Time Demand Response Resources will, in many cases, continue to exist 14 and to be associated with Demand Response Capacity Resources (through 15 Demand Response Resources) to participate in the market. It is also possible a 16 New Demand Response Capacity Resource that qualified to participate in Capacity Commitment Period starting on June 1, 2017 will be able to participate 17 18 in the markets prior to the commencement of the first Capacity Commitment 19 Period for PRD FI on June 1, 2017. Therefore, specific language is proposed to 20 manage the following situations:
  - In the case of early commercial operation, a Demand Response Capacity

    Resource that is ready for operation prior to June 1, 2017 will be treated as

| 1  |    | a Real-Time Demand Response Resource to participate in the market              |
|----|----|--|
| 2  |    | before June 1, 2017.   |
| 3  |    | • For the transition of audit values, Seasonal DR Audit results of Real-Time   |
| 4  |    | Demand Response Assets performed during the Capacity Commitment                |
| 5  |    | Period beginning June 1, 2016 will remain valid for those same assets          |
| 6  |    | once they are transitioned to Demand Response Assets, until the next audit     |
| 7  |    | is required pursuant to the existing audit rules.                              |
| 8  |    | • With the implementation of the PRD FI on June 1, 2017, the qualification     |
| 9  |    | process for that Capacity Commitment Period no longer allows Real-Time         |
| 10 |    | Demand Response Resources to qualify (as they have been replaced by            |
| 11 |    | Demand Response Capacity Resources). As a result, Real-Time Demand             |
| 12 |    | Response Resources have been eliminated from this portion of the               |
| 13 |    | qualification process.   |
| 14 |    |  |
| 15 |    | h. REVISIONS TO APPLICABLE DEFINED TERMS                                       |
| 16 | Q: | What changes are being made to defined terms that are applicable for PRD       |
| 17 |    | FI?  |
| 18 | A: | The definition changes in Section I.2.2 fall into three categories.            |
| 19 |    | • Incorporate PRD FI definitions into the Tariff now to ensure it is clear how |
| 20 |    | the defined term is applied under the PRD TP rules and how it changes under    |
| 21 |    | the PRD FI rules.  |
| 22 |    | • Various additions and deletions to definitions, as well as clarifications to |
| 23 |    | certain definitions.   |

• Corrections to improperly capitalized defined terms.

Q: Please explain why definitions that are specific to PRD FI are being
 incorporated into the Tariff now, during PRD TP.

There are a number of definitions for PRD FI that are currently slated to become effective on June 1, 2017. These definitions were submitted as part of prior PRD filings and have been accepted by the Commission. Because the ISO is proposing to make both the PRD TP rules and the PRD FI rules effective now, it is also necessary to make the PRD FI definitions effective now.

A:

Q: Won't this cause confusion – having two sets of definitions that are applicable to different time periods effective at the same time?

No. In many instances, the defined term being incorporated into the Tariff now is only applicable for the PRD FI, and is not utilized for the PRD TP. For defined terms that are also used in the PRD TP, the proposed Tariff modifications make clear that the PRD FI definition applies only to Capacity Commitment Periods commencing on or after June 1, 2017, or a clarification is otherwise made to the definition to include concepts applicable for the PRD FI in a manner that is not confusing. For example, it was possible to add references to Demand Response Resources in various existing definitions because Demand Response Resources are only applicable to PRD FI.

| 1  |    | Defined terms with proposed modifications to include definitions for "Capacity   |
|----|----|--|
| 2  |    | Commitment Periods commencing on or after June 1, 2017" are: Block, Day-         |
| 3  |    | Ahead Demand Reduction Obligation, Day-Ahead Energy Market, Demand               |
| 4  |    | Reduction Offer, Demand Response Resource, Locational Marginal Price (LMP),      |
| 5  |    | Offer Data, Real-Time Demand Reduction Obligation, Re-Offer Period, and          |
| 6  |    | Resource.  |
| 7  |    |  |
| 8  |    | The following terms have already been accepted by the Commission with a June     |
| 9  |    | 1, 2017 effective date and the ISO is proposing to have them effective now for   |
| 10 |    | PRD FI: Demand Response Asset, Demand Response Available, Demand                 |
| 11 |    | Response Resource, Demand Response Notification Time, Demand Response            |
| 12 |    | Ramp Rate, Demand Response Resource Start-Up Time, Interruption Cost,            |
| 13 |    | Maximum Reduction, Minimum Reduction, Minimum Reduction Time, and                |
| 14 |    | Minimum Time Between Reductions.   |
| 15 |    |  |
| 16 | Q: | Please explain the additions and deletions of definitions.                       |
| 17 | A: | The ISO is proposing to remove defined terms (or portions of defined terms) that |
| 18 |    | were utilized prior to the start of PRD TP and are no longer being utilized. The |
| 19 |    | proposed deleted defined terms are: Amount Interrupted and Customer Baseline.    |
| 20 |    | The terms which have outdated portions that should be removed from them are:     |
| 21 |    | Real-Time Demand Response Event Hours and Real-Time Emergency Generation         |
| 22 |    | Event Hours.   |
| 23 |    |  |

| 1  | Q: | Please explain the clarifications and changes to various definitions.              |
|----|----|--|
| 2  | A: | The definition of Self-Schedule is being clarified to state that Demand Response   |
| 3  |    | Resources are not permitted to Self-Schedule. Although the Tariff is clear on this |
| 4  |    | point, the definition of a Resource is proposed to be modified in this filing to   |
| 5  |    | include Demand Response Resources. Since many references in the Tariff to          |
| 6  |    | Self-Scheduling refer to the Self-Scheduling of "Resources," this clarification is |
| 7  |    | proposed to leave no misinterpretation regarding the concept of Self-Scheduling    |
| 8  |    | and that it is not applicable to Demand Response Resources.                        |
| 9  |    |  |
| 10 |    | Minor clarifications are proposed to several other definitions:                    |
| 11 |    | • The definition of Asset is clarified by adding the words "a component of a."     |
| 12 |    | • The definition of Block is clarified to include the concept that under PRD FI a  |
| 13 |    | Demand Response Resource will submit offers to reduce demand.                      |
| 14 |    | • The definitions of Day-Ahead Energy Market and Real-Time Energy Market           |
| 15 |    | are clarified to include the concept that under the PRD FI rules Demand            |
| 16 |    | Response Resources participate in these markets.                                   |
| 17 |    | • The definition of Demand Designated Entity is clarified to include the concept   |
| 18 |    | that Demand Response Resources are required under PRD FI to receive                |
| 19 |    | Dispatch Instructions through the Demand Designated Entity.                        |
| 20 |    | • The definition of Demand Resource On-Peak Hours is clarified to include          |
| 21 |    | "non-Demand Response Holidays" rather than a generic "non-holidays."               |
| 22 |    | • The definition of Demand Response Holiday has been changed to identify the       |

holidays and the language indicating how these holidays impact when a

Demand Reduction Offer can be submitted is being deleted. During the PRD TP, Real-Time Demand Response Assets are not allowed to submit Demand Reduction Offers on these holidays, and this limitation is already included in Appendix III.E1.3.1.

- The definition of Demand Response Notification Time is being clarified to be
  the lead time required by the Demand Response Resource before it can begin
  to reduce demand in response to a Dispatch Instruction. This is consistent with
  how this concept applies to other supply resources in the energy market.
- The definition of Demand Response Ramp Rate should apply to all times when a Demand Response Resource is operating, and not just during the Demand Response Resource Start-Up Time, and therefore the definition is being revised accordingly to make it consistent with how this concept applies to other supply resources in the energy market.
- The definition of Demand Response Resource Start-Up Time is being clarified, so that it appropriately reflects the time it takes from when the Demand Response Resource initially begins reducing demand (from a state when it had not been dispatched to reduce demand) to the time when the resource achieves its Minimum Reduction. This is consistent with how this concept applies to other supply resources in the energy market.
- The definition of Dispatch Rate is being updated to include Demand Response
   Resources, which are dispatched under the PRD FI rules.
- The definition of Distributed Generation is being modified by replacing the term "behind the Retail Delivery Point," which is applicable only during PRD

- FI, with the more generic term "behind the end-use customer meter," which is applicable during both PRD TP and PRD FI rules. The modifications also incorporate the term Demand Response Resources to the definition since, under PRD FI, Distributed Generation may participate in the energy market through a Demand Response Resource.
  - The definition of Forecast Hourly Demand Reduction is modified to acknowledge how this value is determined for a Real-Time Emergency Generation Asset that is metered at the generator.

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- The definition of Location is clarified to include Dispatch Zones for periods on or after June 1, 2017.
- The definition of Locational Marginal Price is clarified to include a Dispatch
   Zone for periods on or after June 1, 2017.
- The definition of Maximum Generation is clarified to include the output of a Demand Response Asset comprised of Distributed Generation.
- The definition of Maximum Interruptible Capacity is being clarified to include reference to a Demand Response Asset, which is required to report this value in accordance with Appendix III.E2.1.3.
- The definition of Maximum Load is being modified to include a reference
   Demand Response Assets for PRD FI in addition to the asset types that are
   applicable during the PRD TP.
- The definition of Minimum Reduction Time is being modified to remove the generation concept of "commit," which is being replaced with the more appropriate demand response concept of "dispatch to reduce demand".

| 1  |    | • The definition of a Real-Time Emergency Generation Resource is clarified by     |
|----|----|---|
| 2  |    | the addition of the words "rules or regulations" to the list of things that limit |
| 3  |    | the operation of the resource.  |
| 4  |    | • The definition of Re-Offer Period is modified to account for the ability of     |
| 5  |    | Demand Response Resources to modify offers submitted into the Day-Ahead           |
| 6  |    | Energy Market for use in the Real-Time Energy Market.                             |
| 7  |    |   |
| 8  |    | Further, throughout the Tariff, the capitalization of some defined terms is being |
| 9  |    | corrected to properly reference the defined term, along with some other minor     |
| 10 |    | grammatical corrections. These changes included revising retail delivery point in |
| 11 |    | Appendix III.E2 to use the defined term "Retail Delivery Point" from Section      |
| 12 |    | I.2.2.  |
| 13 |    |   |
| 14 |    | i. REMOVE REMAINING REFERENCES TO CRITICAL PEAK DEMAND                            |
| 15 |    | RESOURCES   |
| 16 | Q: | Please explain the removal of the terms related to Critical Peak Demand           |
| 17 |    | Resources.  |
| 18 | A: | Critical Peak Demand Resources were a type of active demand response resource     |
| 19 |    | originally included in the Forward Capacity Market. Before the first Capacity     |
| 20 |    | Commitment Period commenced, however, it was determined that this resource        |

| 1  |    | type should be eliminated, and rules were put in place to eliminate Critical Peak       |
|----|----|---|
| 2  |    | Demand Resource by June 1, 2012.9   |
| 3  |    |   |
| 4  |    | In Docket ER13-876-000, <sup>10</sup> the ISO proposed to delete various obsolete terms |
| 5  |    | from the Tariff. Among the terms to be removed were references to Critical Peak         |
| 6  |    | Demand Resources and their related performance hours, Demand Resource                   |
| 7  |    | Critical Peak Hours. However, there are a few remaining references to Critical          |
| 8  |    | Peak Demand Resources and Demand Resource Critical Peak Hours within the                |
| 9  |    | Tariff. The ISO proposes in this filing to eliminate the remaining references to        |
| 10 |    | Critical Peak Demand Resources as this demand response resource type was                |
| 11 |    | eliminated effective June 1, 2012.  |
| 12 |    |   |
| 13 |    | j. CHANGES TO THE DEMAND REDUCTION THRESHOLD PRICE                                      |
| 14 |    | CALCULATION   |
| 15 | Q: | Please explain the changes to the Demand Reduction Threshold Price                      |
| 16 |    | calculation in Appendix III.E2.   |
| 17 | A: | Under Appendix III.E2, a Demand Reduction Threshold Price ("DRTP")                      |
| 18 |    | calculation is performed on a monthly basis to satisfy the consumer net benefits        |
| 19 |    | test requirement that was mandated by Order No. 745.11 The calculation of the           |
|    |    |   |

<sup>&</sup>lt;sup>9</sup> See Docket No. ER09-5-000 filed October 1, 2008, and accepted by the Commission on October 29, 2008, which eliminated Critical Peak Demand Resources effective June 2012. All Critical Peak Demand Resources were converted to other demand response resource types before June 1, 2010.

<sup>&</sup>lt;sup>10</sup> See Docket No. ER13-876-000 filed with the Commission on February 4, 2013 and accepted by letter order dated May 31, 2013, which eliminated most of the references to Critical Peak Demand Resources.

<sup>&</sup>lt;sup>11</sup> See ISO Tariff, Appendix III.E2.6. The consumer net benefits test is addressed in Order No. 745. See Demand Response Compensation in Organized Wholesale Energy Markets, Order No. 745, III FERC Stats. & Regs., Regs. Preambles ¶ 31,322, 76 Fed. Reg. 16658 (2011) (Order No. 745) at PP 78-81.

| 1  |    | DRTP utilized the monthly Forward Reserve Fuel Index as an input. In Docket          |
|----|----|--|
| 2  |    | No. ER12-2485-000 as part of modifications to the Forward Reserve Threshold          |
| 3  |    | Price calculation for the Forward Reserve Market, 12 the ISO changed the monthly     |
| 4  |    | Forward Reserve Fuel Index to a daily index and made conforming changes to the       |
| 5  |    | PRD TP rules to retain the use of the monthly fuel index for the DRTP. However,      |
| 6  |    | at that time, the ISO did not similarly update the PRD FI rules to retain the use of |
| 7  |    | the monthly fuel index.  |
| 8  |    |  |
| 9  |    | Accordingly, Appendix III.E2.6 of the PRD FI rules is being revised to (1)           |
| 10 |    | uncouple the DRTP computation from the Forward Reserve Fuel Index, (2) retain        |
| 11 |    | the current monthly fuel index for use in the computation of the monthly DRTP as     |
| 12 |    | required by Order No. 745, and (3) post the fuel index data used in the DRTP         |
| 13 |    | computation. These revisions are not substantive changes to Appendix III.E2.6,       |
| 14 |    | as they simply serve the purpose of retaining the monthly fuel index for the         |
| 15 |    | monthly DRTP calculation.  |
| 16 |    |  |
| 17 |    | k. OTHER MINOR CHANGES   |
| 18 | Q: | Are there any other proposed changes that you would like to explain?                 |
| 19 | A: | Yes, there are a couple of additional minor changes that are being proposed.         |
| 20 |    |  |
| 21 |    | In Section III.8A, which contains the baseline calculation rules for PRD TP, the     |
| 22 |    | spelling of the word "weekdays" is being corrected. Also in Section III.8A, the      |

 $<sup>^{\</sup>rm 12}$  ER12-2485-000 filed August 20, 2012 and accepted by the Commission on October 24, 2012.

| 1  |    | word "that" is being added to a subjunctive clause, and the defined term "Real-  |
|----|----|--|
| 2  |    | Time Emergency Generator" is being corrected to read "Real-Time Emergency        |
| 3  |    | Generation."   |
| 4  |    |  |
| 5  |    | In addition, when describing the physical state of the Demand Response           |
| 6  |    | Resource, Section III.13.7.1.5.10.2, which discusses the availability adjustment |
| 7  |    | uses the terms "online" and "offline" to describe the state of the Demand        |
| 8  |    | Response Resource. These terms are being replaced with the more appropriate      |
| 9  |    | concepts for demand response of "receiving" or "not receiving" a Dispatch        |
| 10 |    | Instruction. These changes ensure that terminology used to refer to the state of |
| 11 |    | the Demand Response Resource is consistent throughout the Tariff.                |
| 12 |    |  |
| 13 | Q: | Does this conclude your testimony?   |
| 14 | A: | Yes.   |

| 1                     | I declare under penalty of perjury that the foregoing is true and correct. |
|-----------------------|--|
| 2<br>3<br>4<br>5<br>6 | Executed on June <u>21</u> , 2013.   |
| 7                     | Henry Y. Yoshimura   |
| 8                     | · ·  |

| 1           | I declare under penalty of perjury that the foregoing is true and correct. |
|-------------|--|
| 2<br>3<br>4 | Executed on June $2/$ , 2013.  |
| 5           |  |
| 6           |  |
| 7           | Christopher A. Parent  |
| 8           |  |
| 9           |  |

| 1<br>2<br>3           |       | UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION    |
|-----------------------|-------|---|
| 4<br>5<br>6<br>7<br>8 | ISO N | New England Inc.  Docket No. ER13000  |
| 9<br>10<br>11<br>12   |       | JOINT TESTIMONY OF HENRY Y. YOSHIMURA<br>AND CHRISTOPHER A. PARENT          |
| 13<br>14              |       | "YOSHIMURA-PARENT NET SUPPLY TESTIMONY"                                     |
| 15                    | I.    | IDENTIFICATION OF WITNESSES   |
| 16<br>17<br>18        |       | A. BACKGROUND AND QUALIFICATIONS OF HENRY Y. YOSHIMURA                      |
| 19                    | Q:    | Please state your name, title, and business address.                        |
| 20                    | A:    | Mr. Yoshimura. My name is Henry Y. Yoshimura. I am the Director of Demand   |
| 21                    |       | Resource Strategy for ISO New England Inc. (the "ISO"), One Sullivan Road,  |
| 22                    |       | Holyoke, Massachusetts 01040-2841.  |
| 23                    |       |   |
| 24                    | Q:    | Please summarize your job responsibilities at ISO New England Inc.          |
| 25                    | A:    | Mr. Yoshimura. I joined the ISO in 2002. In my current position, I am       |
| 26                    |       | responsible for the development of demand resource initiatives for the New  |
| 27                    |       | England wholesale electricity market and I assist ISO business units in     |
| 28                    |       | implementing these initiatives. I manage the ISO's Demand Resource Strategy |

<sup>&</sup>lt;sup>1</sup> Capitalized terms used but not defined in this testimony are intended to have the meaning given to such terms in the ISO New England Inc. Transmission, Markets and Services Tariff, FERC Electric Tariff No. 3 ("ISO Tariff"), the Second Restated New England Power Pool Agreement, and the Participants Agreement.

Department to develop program and market designs that integrate demand resources into the wholesale electricity markets, work with the ISO's Market Design group under the direction of Dr. Robert Ethier, the Vice President of Market Development, and work with external and internal stakeholder groups (e.g., program participants, demand resource providers, New England Power Pool ("NEPOOL") Participants, state and Federal regulators, and the ISO's Market and System Operations, Planning, Settlements and IT Departments) to successfully implement such programs and market designs. I also help integrate the ISO's demand resource initiatives with other markets such as the capacity, reserve and regulation markets, and with the ISO's Regional System Planning process in order to ensure efficient market design and consistent planning assumptions.

While at the ISO, I have served on the Board of Directors of the Demand Response Coordinating Committee and the Board of Directors of its successor organization, the Association for Demand Response and Smart Grid ("ADS"). ADS is a nonprofit organization consisting of policymakers, utilities, system operators, technology companies, consumers, and other stakeholders involved in the demand response and smart grid space. ADS facilitates the exchange of ideas, information, and expertise to help its members advance the deployment of demand response and smart grid.

I also serve as the Chair of the Demand Resources Working Group, which is a standing working group of the NEPOOL Markets Committee (the "Markets

| 1  |    | Committee") that reviews proposed changes to the market rules and the ISO New    |
|----|----|--|
| 2  |    | England Manuals pertaining to demand resources as directed by the Markets        |
| 3  |    | Committee officers. The Demand Resources Working Group also provides a           |
| 4  |    | forum for stakeholders and the ISO to exchange ideas and information on topics   |
| 5  |    | such as: demand resource program implementation, business process                |
| 6  |    | improvements, marketing activities, administrative or operational problems and   |
| 7  |    | issues relating to the participation of demand resources in the wholesale        |
| 8  |    | electricity markets, ISO filings with the Commission concerning demand           |
| 9  |    | resources, and the results of analyses concerning demand resource performance.   |
| 10 |    |  |
| 11 |    | I have appeared before the Federal Energy Regulatory Commission                  |
| 12 |    | ("Commission") on behalf of the ISO on several occasions addressing demand       |
| 13 |    | response in organized electricity markets. Specifically, I appeared before the   |
| 14 |    | Commission in technical conferences on Demand Response in Organized Electric     |
| 15 |    | Markets held on April 23, 2007 in Docket No. AD07-11-000 and May 21, 2008 in     |
| 16 |    | Docket No. AD08-8-000, and concerning the National Action Plan on Demand         |
| 17 |    | Response held on November 19-20, 2009 in Docket No. AD09-10-000. I have          |
| 18 |    | sponsored testimony on demand response topics on behalf of the ISO many times.   |
| 19 |    |  |
| 20 | Q: | Please summarize your experience and qualifications prior to joining the         |
| 21 |    | ISO.   |
| 22 | A: | Mr. Yoshimura. Before joining the ISO, I spent approximately two years in        |
| 23 |    | Jakarta, Indonesia with the Institute of International Education as the Chief of |

| Party of a USAID-sponsored project in which I led and mentored a group of            |
|--|
| Indonesian staff to advise and assist the Government of Indonesia to restructure     |
| the Indonesian electricity sector and set up appropriate regulatory institutions.    |
| Before my assignment in Indonesia in 2000, I was a Senior Consultant of              |
| Economics and Public Policy for XENERGY Consulting, Inc., where I managed a          |
| variety of projects related to electric industry restructuring in the United States. |
| Before joining XENERGY in 1997, I was a Senior Consultant with La Capra              |
| Associates, a Boston-based consulting firm specializing in utility regulatory        |
| matters. While with La Capra, I assisted several electric and gas utilities in       |
| evaluating the cost-effectiveness of demand-side management options for              |
| inclusion in their integrated resource plans. I also advised the Massachusetts       |
| Division of Energy Resources ("DOER") in a series of proceedings including the       |
| Massachusetts Department of Public Utilities ("DPU") rulemaking concerning           |
| electric industry restructuring and assisted the DOER in settlement negotiations     |
| with Massachusetts Electric Company ("MECo") concerning the structure of             |
| MECo's restructuring plan, including the structure of the Standard Offer bidding     |
| process. Before joining La Capra Associates in 1992, I served on the staff of the    |
| DPU for about ten years and held several positions including Senior Economist,       |
| Assistant Director of the Electric Power Division, and Director of the Electric      |
| Power Division. As Director of the DPU's Electric Power Division, I managed          |
| staff working in the areas of utility cost of service and rate design, integrated    |
| resource planning, and demand-side management. I participated in the                 |
| development and implementation of numerous regulatory policies such as               |

| 1  |                 | marginal cost-based rate design, cost recovery standards for utility generation,   |
|--|-----------------|--|
| 2  |                 | competitive bidding regulations for non-utility generation, integrated resource  |
| 3  |                 | management, and the incorporation of environmental externalities in utility  |
| 4  |                 | integrated resource planning.  |
| 5  |                 |  |
| 6  |                 | I have bachelor and graduate degrees in economics from the University of   |
| 7  |                 | Montana. Including my work in graduate school, which was in the energy field, I  |
| 8  |                 | have about 30 years of domestic and international experience as an economist and   |
| 9  |                 | public policy expert in the electric power industry.   |
| 10   |                 |  |
| 11<br>12<br>13                               |                 | B. BACKGROUND AND QUALIFICATIONS OF CHRISTOPHER A. PARENT  |
|  |                 |  |
| 14   | Q:              | Please state your name, title, and business address.   |
| 14<br>15                                     | <b>Q:</b><br>A: | Please state your name, title, and business address.  Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market   |
|  |                 |  |
| 15   |                 | Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market   |
| 15<br>16                                     |                 | Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market Development Department at the ISO. My business address is One Sullivan Road,  |
| 15<br>16<br>17                               |                 | Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market Development Department at the ISO. My business address is One Sullivan Road,  |
| 15<br>16<br>17<br>18                         | A:              | Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market Development Department at the ISO. My business address is One Sullivan Road, Holyoke, Massachusetts 01040.  |
| 15<br>16<br>17<br>18<br>19                   | A:<br><b>Q:</b> | <ul> <li>Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market</li> <li>Development Department at the ISO. My business address is One Sullivan Road,</li> <li>Holyoke, Massachusetts 01040.</li> <li>Please summarize your job responsibilities at ISO New England Inc.</li> </ul>  |
| 15<br>16<br>17<br>18<br>19<br>20             | A:<br><b>Q:</b> | <ul> <li>Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market</li> <li>Development Department at the ISO. My business address is One Sullivan Road,</li> <li>Holyoke, Massachusetts 01040.</li> <li>Please summarize your job responsibilities at ISO New England Inc.</li> <li>Mr. Parent. I have been with the ISO since July 2004 and have held various</li> </ul>  |
| 15<br>16<br>17<br>18<br>19<br>20<br>21       | A:<br><b>Q:</b> | <ul> <li>Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market</li> <li>Development Department at the ISO. My business address is One Sullivan Road,</li> <li>Holyoke, Massachusetts 01040.</li> <li>Please summarize your job responsibilities at ISO New England Inc.</li> <li>Mr. Parent. I have been with the ISO since July 2004 and have held various positions within the organization, including Supervisor of Hourly Settlements,</li> </ul>   |
| 15<br>16<br>17<br>18<br>19<br>20<br>21<br>22 | A:<br><b>Q:</b> | <ul> <li>Mr. Parent. My name is Christopher A. Parent. I am the Manager of the Market Development Department at the ISO. My business address is One Sullivan Road, Holyoke, Massachusetts 01040.</li> <li>Please summarize your job responsibilities at ISO New England Inc.</li> <li>Mr. Parent. I have been with the ISO since July 2004 and have held various positions within the organization, including Supervisor of Hourly Settlements, Supervisor of Business Analysis, and Manager of Business Development. I was</li> </ul> |

| 1  |     | President of Market Development. In my present position, I am responsible for      |
|----|-----|--|
| 2  |     | coordinating the market development work at the ISO. By working closely with       |
| 3  |     | my staff, internal business units and external stakeholders on proposed changes to |
| 4  |     | the market design, I help to ensure that proposed solutions to market issues       |
| 5  |     | address the identified scope efficiently and effectively and that they are fully   |
| 6  |     | vetted through the internal ISO review and external stakeholder processes.         |
| 7  |     |  |
| 8  | Q:  | Please summarize your experience and qualifications prior to joining the           |
| 9  |     | ISO.   |
| 10 | A:  | Mr. Parent. Prior to joining the ISO, I worked for Accenture (formally Andersen    |
| 11 |     | Consulting) as an energy industry consultant. My clients included both energy      |
| 12 |     | trading companies and Independent System Operators and Regional Transmission       |
| 13 |     | Organizations ("ISOs/RTOs"). When working with the ISOs/RTOs, I was                |
| 14 |     | responsible for developing business and technology solutions to implement their    |
| 15 |     | market designs. When working with energy companies, my primary focus was on        |
| 16 |     | developing business and technology solutions to support their trading and back-    |
| 17 |     | office processes.  |
| 18 |     |  |
| 19 |     | I hold a B.S. in Business Administration with a minor in Computer Science from     |
| 20 |     | St. Michael's College in Vermont.  |
| 21 |     |  |
| 22 | II. | PURPOSE, SCOPE AND BACKGROUND OF DIRECT TESTIMONY                                  |
| 23 |     |  |

| Q: What is the purpose of this testim | ony? | v? |
|---------------------------------------|------|----|
|---------------------------------------|------|----|

A: The purpose of this testimony is to explain the ISO's revised market rules regarding how a Demand Response Capacity Resource participates in the Forward Capacity Market ("FCM") in which a portion of the resource provides capacity by delivering net supply. Net supply refers to the injection of energy into the electrical grid at a Retail Delivery Point by a Demand Response Asset with Distributed Generation. A Demand Response Asset (which is part of a Demand Response Resource, which in turn is part of a Demand Response Capacity Resource) with Distributed Generation that can operate in parallel to, and has the required interconnection with, the power system is capable of delivering net supply. An asset capable of delivering net supply that meets the specifications of the revised market rules will be eligible to participate in the FCM as a capacity resource and receive compensation for its capacity contribution.

Q:

A:

Why are market rule changes to allow an asset capable of delivering net supply to be eligible to participate in the FCM being proposed at this time? In a series of market rule changes to address the FCM treatment of demand resources under the fully integrated price responsive demand rules submitted to the Commission in April 2012, the ISO proposed an alternative treatment of net supply that would have required the generator to be registered in the FCM as a Generating Capacity Resource, rather than as part of a Demand Response

Capacity Resource. In its January 14, 2013 order on the proposed changes, the

| 1  | Commission rejected the ISO's proposed treatment of net supply. Specifically, the  |
|----|--|
| 2  | Commission said:   |
| 3  | We reject ISO-NE's proposal regarding net supply, contained in                     |
| 4  | sections III.E.7.3 and III.13.7.1.5.2 of the proposed Tariff                       |
| 5  | revisions, without prejudice to ISO-NE filing revised Tariff                       |
| 6  | language to clarify its rules regarding demand response resources                  |
| 7  | that provide capacity through both demand reductions and behind-                   |
| 8  | the-meter generation.  |
| 9  | We recognize that the Commission accepted ISO-NE's proposal to                     |
| 10 | compensate injections into the grid from behind-the-meter                          |
| 11 | generation as generation in the energy market, however, ISO-NE                     |
| 12 | has not explained why corresponding changes to the FCM rules are                   |
| 13 | appropriate.   |
| 14 | Therefore, based on the minimal discussion in the record before us,                |
| 15 | we cannot find that ISO-NE's proposal regarding net supply is just                 |
| 16 | and reasonable. In the one example raised in the record, ISO-NE's                  |
| 17 | proposal would not fully recognize the capacity value of a demand                  |
| 18 | response resource. As a result, in this example, ISO-NE would                      |
| 19 | procure more capacity than needed. Therefore, ISO-NE will need                     |
| 20 | to address in any future filing the issues identified herein in order              |
| 21 | to ensure that the resource's capacity value is appropriately                      |
| 22 | calculated and to support its proposal as just and reasonable. <sup>2</sup>        |
| 23 |  |
| 24 | With the rejection of the ISO's proposed treatment of net supply in the April 2012 |
| 25 | Filing, the current market rules for full integration lack clarity on whether and  |
| 26 | how an asset capable of delivering net supply participates in the FCM. These       |
| 27 | market rule changes are meant to clarify how net supply participates in the FCM    |
| 28 | so that the capacity it delivers to the New England electric system is properly    |
| 29 | recognized and compensated.  |
|    |  |

 $<sup>^2</sup>$  ISO New England Inc., 142 FERC ¶ 61,027 (January 14, 2013) ("January 14 Order") at PP 43-45. On January 15, 2013, the Commission issued an Errata Notice that deleted Paragraph 32 in its entirety and corrected Paragraph 33. All references to the January 14 Order are to the corrected version.

| 1 2 | III. | SUMMARY OF AND JUSTIFICATION FOR THE PROPOSED MARKET RULE CHANGES                         |
|-----|------|---|
| 3 4 | Q:   | Please summarize how net supply would participate in the FCM under the                    |
| 5   |      | proposed market rule revisions described in this testimony.                               |
| 6   | A:   | The ISO proposes to allow net supply delivered by a Demand Response Asset to              |
| 7   |      | contribute to the capacity of a Demand Response Capacity Resource with which              |
| 8   |      | the asset is associated. That is, this set of market rule changes does <i>not</i> require |
| 9   |      | the Market Participant to register in the FCM two resources – i.e., a Demand              |
| 10  |      | Response Capacity Resource and a Generating Capacity Resource – to receive                |
| 11  |      | full credit for the capacity associated with net supply. Rather, the capacity             |
| 12  |      | associated with net supply will be credited directly to the Demand Response               |
| 13  |      | Capacity Resource with which the Demand Response Asset is associated.                     |
| 14  |      |   |
| 15  |      | Finally, the market rules are being clarified so that Real-Time Emergency                 |
| 16  |      | Generation Resources capable of producing net supply would also receive full              |
| 17  |      | credit for the capacity associated with net supply.                                       |
| 18  |      |   |
| 19  | Q:   | Why does the ISO propose to credit net supply to a Demand Response                        |
| 20  |      | Capacity Resource in this filing rather than to a separate Generating                     |
| 21  |      | Capacity Resource as it had proposed to do in the April 2012 filing?                      |
| 22  | A:   | In the context of the April 2012 filing, certain Market Participants raised concerns      |
| 23  |      | that dividing the capacity of an asset that produces both demand reductions and           |
| 24  |      | net supply between a Demand Response Capacity Resource and a Generating                   |
| 25  |      | Capacity Resource involved factors that could not be projected on the three-year          |

forward basis. The ISO believes that the approach proposed in this filing addresses these concerns while appropriately accounting for and compensating Market Participants with Demand Response Assets capable of producing net supply.

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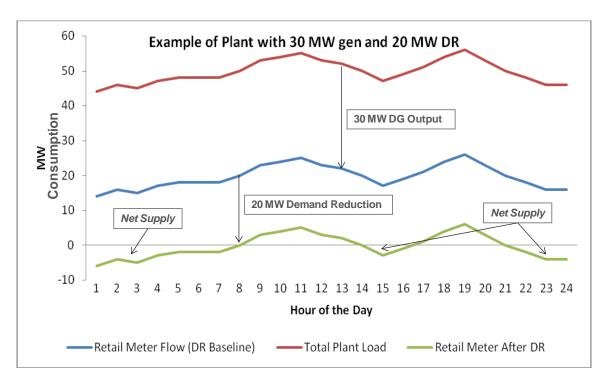
3

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Under the FCM structure, Market Participants must qualify resources and participate in a Forward Capacity Auction three years in advance of the Capacity Commitment Period. This requires Market Participants to estimate three years ahead of the Capacity Commitment Period the amount of demand reduction and net supply that a Demand Response Asset with Distributed Generation would likely produce. Whereas the sum of demand reduction and net supply produced by a Demand Response Asset with Distributed Generation could be relatively stable and predictable, the individual components – i.e., the amount of demand reduction versus the amount of net supply – provided on any given day or hour could fluctuate across time (e.g., hours, seasons) and be difficult to predict. As a result of this difficulty, the Commission noted in the January 14 Order that the treatment of net supply proposed in the April 2012 filing could result in not fully recognizing the capacity value of an asset that produces both demand reductions and net supply, which would in turn result in the region over-procuring the necessary amount of capacity.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> January 14 Order at P 45.

| 1                          | Q: | Please provide an example of how the sum of demand reduction and net  |
|----------------------------|----|---|
| 2                          |    | supply produced by a Demand Response Asset with Distributed Generation  |
| 3                          |    | could be relatively stable and predictable, but the individual components   |
| 4                          |    | could be volatile.  |
| 5                          | A: | For example, assume a Demand Response Asset with Distributed Generation   |
| 6                          |    | capable of delivering net supply with the following characteristics:  |
| 7<br>8                     |    | <ul> <li>Overall (gross) energy consumption that normally varies between 45 to 55 MW each Operating Day.</li> </ul>   |
| 9                          |    | <ul> <li>A Distributed Generator with a capacity of 30 MW.</li> </ul>   |
| 10<br>11<br>12<br>13<br>14 |    | • The customer runs this generator in base-load fashion – i.e., the generator runs at 30 MW in each interval of each Operating Day – which reduces the net energy consumption placed on the wholesale power grid by 30 MW, which in turn lowers the customer's demand response potential. |
| 15<br>16                   |    | <ul> <li>The capability of reducing 20 MW of energy consumption in each interval.</li> </ul>  |
| 17<br>18<br>19             |    | <ul> <li>20 MW demand reduction potential reflects turning off specific<br/>machinery that normally run during the Operating Day and<br/>consume 20 MW.</li> </ul>  |
| 20                         |    | Figure 1 below provides an illustration of what happens when this Demand  |
| 21                         |    | Response Asset reduces its energy consumption by 20 MW in each interval.  |



As Figure 1 shows, the *demand on the wholesale power grid* is reduced, but not by 20 MW in each interval. 20 MW of demand is reduced from the grid in intervals 0800 to 1400 and 1600 to 2100. Less than 20 MW of demand is reduced from the grid in intervals 0100 to 0800, 1400 to 1600, and 2100 to 2400 – however, these are also the intervals in which net supply is provided to the electric system. As Figure 1 demonstrates, the amount of demand reduction and net supply changes from interval to interval, but 20 MW of total supply was provided in the form of demand response, or in the form of demand response and net supply, in each interval.

A:

## Q: What do you conclude from this example?

Quantifying three years ahead of real time the amount of demand reduction versus net supply such an asset would likely produce, and assigning those values to

| 1        |      | separate resources – i.e., a Demand Response Capacity Resource and a                 |
|----------|------|--|
| 2        |      | Generating Capacity Resource, respectively – in the FCM qualification process        |
| 3        |      | may be difficult to accomplish, whereas it is relatively easy to determine what the  |
| 4        |      | sum of demand reduction and net supply will likely be three years in advance.        |
| 5        |      |  |
| 6        | Q:   | How does the treatment of net supply being proposed in the current filing            |
| 7        |      | avoid the challenges posed by the treatment proposed in the April 26 Filing?         |
| 8        | A:   | Given that the sum of demand reduction and net supply is relatively stable,          |
| 9        |      | allowing the net supply and the demand reduction amount to be credited to the        |
| 10       |      | capacity of a single resource, as is proposed under the current filing, resolves the |
| 11       |      | concerns that were raised with the ISO's initial proposal, and accurately accounts   |
| 12       |      | for the full capacity value of the combined resource in the FCM. Therefore, the      |
| 13       |      | proposed market rule changes described in this testimony allow net supply            |
| 14       |      | delivered by a Demand Response Asset to contribute to the capacity of a Demand       |
| 15       |      | Response Capacity Resource to which the asset is associated.                         |
| 16       |      |  |
| 17       | III. | EXPLANATION OF PROPOSED TARIFF CHANGES   |
| 18       |      | A. INTRODUCTION  |
| 19<br>20 | Q:   | What areas of the Tariff are being modified to allow net supply delivered by         |
| 21       |      | a Demand Response Asset to contribute to the capacity of a Demand                    |
| 22       |      | Response Capacity Resource to which the asset is associated?                         |
| 23       | A:   | Numerous market rule changes are required to allow net supply delivered by a         |
| 24       |      | Demand Response Asset to contribute to the capacity of a Demand Response             |

| 1                          |    | Capacity Resource to which the asset is associated. Ten areas of the Tariff were  |
|----------------------------|----|---|
| 2                          |    | modified including:   |
| 3                          |    | • Defined terms   |
| 4                          |    | Baseline computations   |
| 5                          |    | <ul> <li>Forward Capacity Auction ("FCA") qualification</li> </ul>                |
| 6                          |    | Availability calculation for Supplemental Availability Bilaterals                 |
| 7                          |    | Energy market offer requirements  |
| 8                          |    | <ul> <li>Demand Response Capacity Resource auditing</li> </ul>                    |
| 9                          |    | <ul> <li>Avoided transmission and distribution loss adjustment</li> </ul>         |
| 10                         |    | Hourly availability calculations  |
| 11                         |    | Settlement calculations   |
| 12                         |    | Conforming energy market rule changes   |
| 13<br>14<br>15<br>16<br>17 |    | B. EXPLANATION OF INDIVIDUAL TARIFF CHANGE PROVISIONS                             |
| 18                         | Q: | Please explain the changes to the defined terms section of the Tariff.            |
| 19                         | A: | There are three new defined terms and one modified defined term in the proposed   |
| 20                         |    | Tariff changes. These include:  |
| 21<br>22                   |    | • Net Supply (new term).  |
| 23                         |    | Net Supply is defined as energy injected at the Retail Delivery Point by a Demand |
| 24                         |    | Response Asset with Distributed Generation. This defined term was inserted in     |
| 25                         |    | various sections of the Tariff to clearly indicate how the capacity and energy    |
| 26                         |    | associated with Net Supply would be accounted for and compensated.                |
| 27                         |    |   |
| 28<br>29                   |    | • Maximum Net Supply (new term).  |

Maximum Net Supply is defined as the estimate of the maximum hourly Net Supply for a Demand Response Asset as measured from the asset's Retail Delivery Point. The amount of Maximum Net Supply associated with a Demand Response Asset must be provided to the ISO by the Market Participant because the energy market rules as described in Appendix III.E.1.3 applies different registration and resource aggregation requirements to different sized assets. Asset size also plays a role in how the asset will be modeled in the energy market.

## • **Net Supply Generator Asset** (new term).

Net Supply Generator Asset is defined as the Generator Asset *registered in the*energy market at the same Retail Delivery Point as a Demand Response Asset

with Distributed Generation capable of delivering Net Supply. Whereas Net

Supply would contribute to the capacity of a Demand Response Capacity

Resource, Net Supply must currently be modeled as a Generator Asset in the
energy market. This is because the energy market model makes a distinction
between assets that withdraw energy versus those that inject energy into the
electric system. A Demand Response Resource, which is an aggregation of
Demand Response Assets, will be modeled in the energy market as a resource that
withdraws energy from the electric system in different amounts at different times
within a Dispatch Zone. However, an asset that injects energy into the system
must be separately modeled. To enable the commitment, dispatch and settlement

<sup>&</sup>lt;sup>4</sup> Demand Response Resources, which are aggregations of Demand Response Assets, are the resources that participate in the energy market. Demand Response Capacity Resources, which are comprised of one or more Demand Response Resources, meet its Capacity Supply Obligations through its Demand Response Resources.

| 1        |    | of Net Supply in the energy market, Net Supply must be modeled in the energy       |
|----------|----|--|
| 2        |    | market as a Generator Asset that injects energy in the electric system. Therefore, |
| 3        |    | the Generator Asset that produces Net Supply will be called a Net Supply           |
| 4        |    | Generator Asset.   |
| 5        |    |  |
| 6        |    | • Offered Full Reduction Time (modified term).                                     |
| 7<br>8   |    | This definition was modified to incorporate the sum of the Economic Maximum        |
| 9        |    | Limits of any available Net Supply Generator Assets that are associated with a     |
| 10       |    | Demand Response Capacity Resource. This change was needed to recognize that        |
| 11       |    | the computation of a Demand Response Capacity Resource's performance must          |
| 12       |    | include the Net Supply produced by any Net Supply Generator Assets that are        |
| 13       |    | associated with the resource.  |
| 14       |    |  |
| 15       | Q: | Please explain the changes to the baseline computation section of the Tariff.      |
| 16       | A: | Two provisions affecting the Demand Response Baseline computation section of       |
| 17       |    | the Tariff were modified. These include:   |
| 18       |    | • Section III.8B.1. Demand Response Baseline Calculations.                         |
| 19<br>20 |    | The ISO proposes to replace the phrase "net supply of energy to the electrical     |
| 21       |    | system" with the defined term "Net Supply." This is a clarifying change that is    |
| 22       |    | appropriate because the concept addressed in the definition of Net Supply is the   |
| 23       |    | same as the language being replaced.   |
| 24<br>25 |    | • Section III.8B.5. Baseline Adjustment.   |

This section is being changed to make clear that Net Supply is used in calculating the baseline adjustment factor. To produce an accurate Demand Response Baseline for an Operating Day, the baseline for a Demand Response Asset is adjusted based on the difference between the computed Demand Response Baseline for the Operating Day and the actual load of the asset two hours (plus the Demand Response Resource's Start-up Time) prior to the start of the first interruption interval in the Operating Day. If the actual load of the asset is higher than the computed baseline, the baseline is adjusted upward; conversely, if the actual load of the asset is lower than the computed baseline, the baseline is adjusted downward. Adjusting baselines symmetrically as described above were previously found by the Commission to "result in an accurate and appropriate baseline calculation methodology that will account for more recent meter data and changes in conditions, such as weather, which differ on the current operating day from those present during the days used to compute the baseline."5 If the Demand Response Asset has Distributed Generation and was producing Net Supply during the baseline adjustment period, the proposed Tariff change would ensure that the Net Supply amount is included in computing the baseline

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Supply during the baseline adjustment period, the proposed Tariff change would ensure that the Net Supply amount is included in computing the baseline adjustment. This change will help ensure an accurate baseline, so the impact of the Demand Response Asset on the electric system to balance supply and demand in the energy market can be accurately computed.

 $<sup>^5</sup>$  ISO New England Inc., 138 FERC ¶ 61,042 (addressing the ISO's Order No. 745 compliance filing) at P 34.

|  | ( | Q: | Please ex | plain the | changes to | o the FCA | qualification | section o | of the | Tar | iff |
|--|---|----|-----------|-----------|------------|-----------|---------------|-----------|--------|-----|-----|
|--|---|----|-----------|-----------|------------|-----------|---------------|-----------|--------|-----|-----|

A: Three provisions affecting the FCA qualification section of the Tariff were modified. These include:

## • Section III.13.1. Forward Capacity Auction Qualification.

This section was changed to prevent double-counting of Net Supply by prohibiting a generator and a demand resource located at the same Retail Delivery Point from both participating in the FCM as separate capacity resources. In the April 26 Filing, the ISO proposed that the capacity associated with demand reductions be credited to a demand resource, and the capacity associated with energy injections be credited to a generating resource. Such an approach avoids the potential to double-count the capacity associated with any Net Supply. Since the market rules proposed herein assign the capacity associated with Net Supply to a Demand Response Capacity Resource, the same Net Supply should not be allowed to contribute to the capacity of a separate Generating Capacity Resource. Otherwise the capacity associated with Net Supply will be double counted, which will result in an under-procurement of capacity to meet the Installed Capacity Requirement.

To avoid double counting of Net Supply, the proposed market rules prohibit a

Generator Asset and a Demand Response Asset located at the same Retail

Delivery Point from both participating in the FCM as part of separate capacity
resources, i.e., the Net Supply produced at a Retail Delivery Point cannot

| 1              | contribute to the capacity of both a Generating Capacity Resource and a Demand  |
|----------------|---|
| 2              | Resource at the same time.  |
| 3              |   |
| 4<br>5<br>6    | Section III.13.1.4.3. Measurement and Verification Applicable to All Demand Resources.  This provides the second of the sec |
| 7              | This section is being modified to incorporate the concepts of a Demand Response   |
| 8              | Asset with Net Supply into the qualification requirements for a Demand Resource   |
| 9              | and to prevent double-counting of Net Supply by prohibiting a Net Supply  |
| 10             | Generator Asset from participating in the FCM as a Generating Capacity  |
| 11             | Resource. The language added to this section of the Tariff allows the estimated   |
| 12             | Demand Reduction Value of a Demand Response Capacity Resource to include  |
| 13             | an estimate of Net Supply. Further, as I explained directly above, while a  |
| 14             | Generator Asset (e.g., a Net Supply Generator Asset) may be located at the same   |
| 15             | Retail Delivery Point as a Demand Response Asset that is associated with a  |
| 16             | Demand Response Capacity Resource for the purposes of participating in the  |
| 17             | energy market, that Generator Asset may not participate the Forward Capacity  |
| 18             | Market as a Generating Capacity Resource – this prohibition is to prevent double-   |
| 19             | counting of Net Supply in the FCM. Language similar to that being added to  |
| 20             | Section III.13.1 is being added to Section III.13.1.4.3 to address this same point.   |
| 21             |   |
| 22<br>23<br>24 | • Section III.13.1.4.3.2. Measurement and Verification Documentation of Demand Reduction Values Applicable to All Demand Resources.   |
| 25             | This section is also being modified to incorporate the concepts of a Demand   |
| 26             | Response Asset with Net Supply into the qualification requirements. As with   |

section III.13.1.4.3, language is being added to this section of the Tariff to allow the estimated Demand Reduction Value of a Demand Response Capacity

Resource to include an estimate of Net Supply.

A:

O:

You mentioned that Sections III.13.1 and III.13.1.4.3 were modified to prevent double-counting of Net Supply by prohibiting a generator and a demand resource located at the same Retail Delivery Point from both participating in the FCM. However, the proposed market rule changes in these sections also include language that allow a Generating Capacity Resource or a Generator Asset that is separately metered, where its output is added to the metered load as measured at the Retail Delivery Point, to participate in the FCM separately from a Demand Resource. Why is this appropriate?

There are circumstances that currently exist in which both a generator and a demand are located behind a common retail meter, and the Market Participant made arrangements with the Host Participant (i.e., the utility distribution company) to separately meter the output of the generator so that it could participate in the wholesale energy and/or capacity markets directly. In these instances, the Host Participant adjusts the reading of the retail meter – by adding the generator output to the retail meter reading – to reflect the total consumption of the facility. The purpose of this metering arrangement is to (1) prevent double-counting the output of the generator – once at the generator, and once again as a net reduction in the facility's billing demand – and to (2) allow the generator and

| 1  |    | the demand to participate in the wholesale market separately. Such a metering       |
|----|----|---|
| 2  |    | configuration achieves an outcome that is comparable to reconfiguring the           |
| 3  |    | transmission-distribution system at the facility such that the generation output is |
| 4  |    | injected into the system at a point completely separate from the point at which     |
| 5  |    | demand is withdrawn, but is probably substantially less costly.                     |
| 6  |    |   |
| 7  |    | Because this metering configuration avoids double-counting, and the generator       |
| 8  |    | and the demand are both participating in the wholesale market as separate entities  |
| 9  |    | it is appropriate to allow both the generator and the demand to participate in the  |
| 10 |    | FCM as a Generating Capacity Resource and a Demand Resource, respectively.          |
| 11 |    |   |
| 12 |    | For this reason, the proposed market rules allow a Generating Capacity Resource     |
| 13 |    | or a Generator Asset that is separately metered, where its output is added to the   |
| 14 |    | metered demand as measured at the Retail Delivery Point so as to avoid double-      |
| 15 |    | counting, to participate in the FCM separately from a Demand Resource located       |
| 16 |    | at the Retail Delivery Point.   |
| 17 |    |   |
| 18 | Q: | Does this proposed treatment allow a generator located behind the meter             |
| 19 |    | with a Demand Resource to bypass all the interconnection requirements and           |
| 20 |    | FCM qualification requirements?   |
| 21 | A: | No. The exception for Generator Assets that are separately metered, and which       |
| 22 |    | have the output added to the metered demand measured at the Retail Delivery         |
| 23 |    | Point, only serves as an exception to the prohibition on allowing a Generator       |

| 1  |    | Asset and Demand Response Asset located at the same Retail Delivery Point from      |
|----|----|---|
| 2  |    | participating as separate resources in FCM. It provides no other exceptions from    |
| 3  |    | any of the requirements in the Tariff. Therefore, that generator would have to go   |
| 4  |    | through all required interconnection processes and otherwise comply with all        |
| 5  |    | FCM qualification rules.  |
| 6  |    |   |
| 7  | Q: | Please explain the changes to the availability calculation for Supplemental         |
| 8  |    | Availability Bilaterals.  |
| 9  | A: | The FCM rules allow a resource's availability score during a Shortage Event to be   |
| 10 |    | supplemented by entering into a Supplemental Availability Bilateral agreement,      |
| 11 |    | which in practice could allow a Market Participant to improve their overall         |
| 12 |    | availability rating for purposes of determining the impact during the Shortage      |
| 13 |    | Event. Net Supply associated with a Demand Response Capacity Resource               |
| 14 |    | should be allowed to provide supplemental capacity as well as the demand            |
| 15 |    | reduction component of the resource. Therefore, changes to Section III.13.5.3.2.3   |
| 16 |    | are being made to allow Net Supply (with proper adjustment for avoided              |
| 17 |    | transmission and distribution losses) to be used in the calculation of availability |
| 18 |    | for Supplemental Availability Bilaterals.   |
| 19 |    |   |
| 20 | Q: | Please explain the modifications to the energy market offer requirements.           |
| 21 | A: | Five sections of the FCM rules concerning energy market offer requirements of       |
| 22 |    | Demand Response Capacity Resources are being modified to account for Net            |
| 23 |    | Supply.   |

The following three sections are each being modified to add the concept that a

Demand Response Capacity Resource meets its energy market offer obligation by
submitting Demand Reduction Offers for demand reductions produced by its

Demand Response Resources and by submitting Supply Offers for the Net Supply
produced by its Net Supply Generator Assets. Further, these sections are being
clarified so that the requirements that apply to the Demand Reduction Offers of
Demand Response Resources also apply to the Supply Offers of Net Supply
Generator Assets.

- Section III.13.6.1.5.1. Energy Market Offer Requirements. (For Demand Resources with a Capacity Supply Obligation)
- Section III.13.6.2.5.1.1. Day-Ahead Energy Market Participation.
- Section III.13.6.2.5.1.2. Real-Time Energy Market Participation.

The revisions in Section III.13.6.1.5.1 also add limitations on the Notification
Time, Start-Up Time, Minimum Run Time and Minimum Down Time for the
Supply Offers of Net Supply Generator Assets. These limitations are the same
offer parameter limitations that apply to other generators that are subject to a
Capacity Supply Obligation, and prevent the use of offer parameters to
significantly reduce the availability of the generator. The revisions in Section
III.13.6.1.5.1 also clarify that if the Net Supply Generator Asset is a Settlement
Only Resource, then the net supply will not be represented in the offer for the
Demand Response Resource. This is because Settlement Only Resources do not
submit offers into the energy market, and instead provide energy as it is available.

| 23<br>24 |    | • Section III.13.6.1.5.4.2. General Auditing Requirements for Demand Response Capacity Resources. |
|----------|----|---|
| 22       |    | include:  |
| 21       |    | auditing are being modified to account for Net Supply. The modified sections                      |
| 20       | A: | Four sections of the FCM rules addressing Demand Response Capacity Resource                       |
| 19       |    | auditing rules.   |
| 18       | Q: | Please explain the changes to the Demand Response Capacity Resource                               |
| 17       |    |   |
| 16       |    | Down Time must also be less than or equal to 24 hours.  |
| 15       |    | an offer is submitted, the sum of the Minimum Run Time plus the Minimum                           |
| 14       |    | Generator Assets are not required to offer into the energy markets. If, however,                  |
| 13       |    | Obligation, Demand Response Capacity Resources and associated Net Supply                          |
| 12       |    | that, as with other Demand Resources not subject to a Capacity Supply                             |
| 11       |    | that are not subject to a Capacity Supply Obligation, is being updated to clarify                 |
| 10       |    | Finally, Section III.13.6.2.5.1, which contains the offer provisions for resources                |
| 9        |    |   |
| 8        |    | then-known operating characteristics of the resource."  |
| 7        |    | associated with the same Demand Response Capacity Resource "must reflect the                      |
| 6        |    | Response Resources and Supply Offers of Net Supply Generator Assets that are                      |
| 5        |    | Therefore, under the revised provision, Demand Reduction Offers of Demand                         |
| 4        |    | being clarified to include the Supply Offers of Net Supply Generator Assets.                      |
| 3        |    | reflect accurate Demand Response Capacity Resource operating characteristics, is                  |
| 2        |    | In addition, Section III.13.6.1.5.2, which addresses the requirement that offers                  |
| 1        |    |   |

energy into the grid if no adjustment is made. Therefore, the rules are being

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modified to adjust the availability or performance of a Net Supply Generator

Asset to prevent such double-counting. When the output of the RTEG asset is
greater than the adjusted Demand Response Baseline of the Demand Response

Asset located at the same Retail Delivery Point and Net Supply is produced, the
proposed rules reduce the Net Supply by the difference between the RTEG asset's
output and the adjusted Demand Response Baseline of the Demand Response

Asset.

A:

Q: Please explain the changes to the application of the avoided transmission and distribution loss adjustment.

To balance supply and demand on the electric system, sufficient generation must be produced to serve the demand and to overcome transmission and distribution ("T&D") losses. When demand is reduced, therefore, generation inclusive of T&D losses are avoided. For example, if T&D losses are eight percent, a 1.00 MW demand reduction measured at the Retail Delivery Point avoids 1.08 MW of generation. Because of this, a demand resource that reduces demand by 1.00 MW is credited for 1.08 MW of capacity in the FCM. However, when Net Supply is produced, the energy injected into the T&D system must travel through the system to serve demand at a different location. That is, Net Supply does not avoid T&D losses – rather, T&D losses are incurred when Net Supply is used as a resource to balance supply and demand. Therefore, whereas the demand reduction component of a Demand Resource should be credited in the FCM for

| 1  |    | avoided T&D losses, Net Supply should not receive such credit. To reflect these   |
|----|----|---|
| 2  |    | observations, the FCM rules are being modified as follows:                        |
| 3  |    |   |
| 4  |    | • III.13.7.1.5.2. Capacity Values of Certain Distributed Generation.              |
| 5  |    | This section is being modified to exclude the application of the avoided T&D loss |
| 6  |    | adjustment from the Net Supply produced by Distributed Generation.                |
| 7  |    |   |
| 8  |    | • III.13.7.1.5.10. Demand Response Capacity Resources.                            |
| 9  |    | This section specifies the conditions under which the avoided T&D loss            |
| 10 |    | adjustment is applied in the availability calculations of a Demand Response       |
| 11 |    | Capacity Resource. The proposed modifications clarify that the avoided T&D        |
| 12 |    | loss adjustment is applied to demand reductions whereas it is not applied to Net  |
| 13 |    | Supply.   |
| 14 |    |   |
| 15 | Q: | Please explain the changes to the hourly availability calculations.               |
| 16 | A: | A Demand Response Capacity Resource's available MW in each hour that              |
| 17 |    | contains any portion of a Shortage Event is based upon the sum of the available   |
| 18 |    | MW of its associated Demand Response Resources. Since Net Supply produced         |
| 19 |    | by a Net Supply Generator Asset should contribute to the available MW of a        |
| 20 |    | Demand Response Resource, which in turn should contribute to the available MW     |
| 21 |    | of a Demand Response Capacity Resource, the FCM rules are being modified to       |
| 22 |    | incorporate the available MW of Net Supply Generator Assets into the availability |

calculations of a Demand Response Capacity Resource. Five provisions of the

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| 1  | FCM rules are modified to account for Net Supply in the hourly availability          |
|----|--|
| 2  | calculations of a Demand Response Capacity Resource:                                 |
| 3  | • III.13.7.1.5.10.1. Hourly Available MW.  |
| 4  | • III.13.7.1.5.10.1.1. Adjusted Audited Demand Reduction.                            |
| 5  | These sections of the FCM rules are being modified to add Net Supply Generator       |
| 6  | Assets into the availability calculations of a Demand Response Capacity              |
| 7  | Resource.  |
| 8  |  |
| 9  | Additionally, these sections are being modified to account for the output of RTEG    |
| 10 | assets located at the same Retail Delivery Point as a Demand Response Asset that     |
| 11 | results in an injection of energy into the electric system – these modifications are |
| 12 | similar to the modifications explained above concerning the auditing of Demand       |
| 13 | Response Capacity Resources. As we explained above in the context of the             |
| 14 | auditing rules, if a Net Supply Generator Asset and a RTEG asset at the same         |
| 15 | location are both producing output and energy is injected into the grid, each asset  |
| 16 | could receive credit for the same injection of energy into the grid if no adjustment |
| 17 | is made. Therefore, the rules are being modified to adjust the availability or       |
| 18 | performance of a Net Supply Generator Asset to prevent such double-counting.         |
| 19 |  |
| 20 | • III.13.7.1.5.10.2. Availability Adjustments.                                       |
| 21 | Changes in this section are being made to (1) clarify that "asset" refers to the     |
| 22 | defined term Demand Response Asset, (2) to incorporate Net Supply Generator          |
| 23 | Asset to the availability adjustment computations, and (3) to account for the        |

| 1  |    | output of RTEG assets located at the same Retail Delivery Point as a Demand         |
|----|----|---|
| 2  |    | Response Asset that results in an injection of energy into the electric system.     |
| 3  |    |   |
| 4  | Q: | Please explain the proposed modifications to the rules addressing settlement        |
| 5  |    | calculations.   |
| 6  | A: | Modifications are being made to the Demand Resource capacity payment rules to       |
| 7  |    | account for necessary adjustments for Net Supply in the settlement calculations     |
| 8  |    | for Demand Resources. Section III.13.7.2.5.4, which specifies the conditions        |
| 9  |    | under which avoided distribution losses are applied in the energy settlement of     |
| 10 |    | RTEG resources, is being clarified, consistent with the revisions to the rules on   |
| 11 |    | the calculation of the transmission and distribution loss adjustment, so that the   |
| 12 |    | demand reduction component of a Demand Resource is credited for avoided             |
| 13 |    | losses and energy injections do not receive such credit. Similar to the rule        |
| 14 |    | changes described above, Section III.13.7.2.5.4.1 is being added to account for the |
| 15 |    | output of a RTEG asset, located at the same Retail Delivery Point as a Demand       |
| 16 |    | Response Asset, resulting in an injection of energy into the electric system. This  |
| 17 |    | section is being added to prevent both a RTEG asset and a Net Supply Generator      |
| 18 |    | Asset from being compensated for energy for the same Net Supply.                    |
| 19 |    |   |
| 20 | Q: | Please explain the conforming energy market rule changes.                           |
| 21 | A: | Four sections of the energy market rules affecting Demand Response Assets and       |
| 22 |    | Demand Response Resources – i.e., Appendix III.E2 – are being modified to           |
| 23 |    | account for Net Supply. These sections include:                                     |

## • III.E2.1.3. Demand Response Asset Registration.

This section is being modified to allow a single Net Supply Generator Asset to be registered at the same Node as a Demand Response Asset that is capable of delivering Net Supply. Registering a Net Supply Generator Asset at the same Node as a Demand Response Asset enables the Market Participant to receive energy payment for any Net Supply that is produced at that location.

Additionally, the current market rules allow small customers from a homogenous population (e.g., residential customers) located in the same Dispatch Zone to be aggregated to form a Demand Response Asset. If some or all of these customers are capable of delivering Net Supply, a single Net Supply Generator Asset may be registered at the same Dispatch Zone as the Demand Response Asset. Again, this enables the Market Participant to receive energy payment for any Net Supply that is produced in that Dispatch Zone.

Finally, under the proposed rule changes, the Market Participant must provide in the registration process the Maximum Net Supply that the Net Supply Generator Asset is capable of delivering – the Maximum Net Supply parameter is used to determine the overall size of the asset, which affects how the asset must be modeled in the energy market, which then determines how the asset must be registered with the ISO. Generally, larger assets (those capable of delivering 5 MW or more of demand reduction and Net Supply) must be modeled individually at a Node given the impact of a large asset on the energy market. Smaller assets

have a lesser impact and can be aggregated with other assets located in the same Dispatch Zone. The amount of Maximum Net Supply associated with a Net Supply Generator Asset will determine how the asset will be modeled in the energy market and determine which registration and resource aggregation requirements apply to the asset.

# • III.E2.5. Scheduling and Dispatching

This section is being clarified to state that Net Supply Generator Assets will be dispatched at the same Location as its associated Demand Response Resource. A Demand Response Resource may consist of a single, large Demand Response Asset with a capacity of 5 MW or greater – such a resource is dispatched and priced on a Nodal basis. Smaller Demand Response Assets (each with a capacity of less than 5 MW) located in the same Dispatch Zone may be aggregated into a Demand Response Resource – such Demand Response Resources are dispatched on a Dispatch Zone basis. To ensure the proper sequencing of demand reductions and Net Supply production, Net Supply Generator Assets must be located in the energy market model in the same Location as the rest of the Demand Response Resource to which it is associated.

A Demand Response Asset capable of delivering Net Supply must first reduce its demand from the electric system (by decreasing energy consumption and/or increasing Distributed Generation output) before producing any Net Supply. That is, it is physically impossible for a Demand Response Asset to produce Net

Supply *before* demand reduction. To ensure proper sequencing of the dispatch of a Demand Response Resource that consist of an aggregation Demand Response Assets and Net Supply Generator Assets, Section III.E2.5 is being modified to clarify that all of the assets that are associated with the resource must be in the same location. If a Net Supply Generator Asset is dispatched at a Node, but the rest of the Demand Response Resource with which it is associated is dispatched at the Dispatch Zone, it is possible that localized constraints between certain Nodes in the Dispatch Zone would result in the Net Supply Generator Asset being dispatched before the demand reduction portion of the resource, even if the price-quantity pair associated with the Net Supply Generator Asset were offered at a higher price than the rest of the resource. To keep this from happening, Net Supply Generator Assets must be modeled and dispatched at the same Location as its associated Demand Response Resource.

## • III.E2.7.2. Real-Time Demand Reduction Obligations

## • III.E2.7.3. Treatment of Net Supply

These two sections are being modified to replace "net supply" with the defined term "Net Supply" or to remove unnecessary references to "net supply." These are clarifying changes.

## **Q:** Does this conclude this testimony?

22 A: Yes.

| 1                     | I declare under penalty of perjury that the foregoing is true and correct. |
|-----------------------|--|
| 2<br>3<br>4<br>5<br>6 | Executed on June <u>21</u> , 2013.   |
| 7                     | Henry Y. Yoshimura   |
| 8                     | · ·  |

| 1           | I declare under penalty of perjury that the foregoing is true and correct. |
|-------------|--|
| 2<br>3<br>4 | Executed on June $2/$ , 2013.  |
| 5           |  |
| 6           |  |
| 7           | Christopher A. Parent  |
| 8           |  |
| 9           |  |

#### New England Governors, State Utility Regulators and Related Agencies\*

#### Maine

The Honorable Paul LePage One State House Station Office of the Governor Augusta, ME 04333-0001 Kathleen.Newman@maine.gov

Maine Public Utilities Commission 18 State House Station Augusta, ME 04333-0018 Maine.puc@maine.gov

#### **New Hampshire**

The Honorable Maggie Hassan
Office of the Governor
26 Capital Street
Concord NH 03301
Molly.Connors@nh.gov
Meredith.Hatfield@nh.gov

New Hampshire Public Utilities Commission
21 South Fruit Street, Ste. 10
Concord, NH 03301-2429
steve.mullen@puc.nh.gov
tom.frantz@puc.nh.gov
george.mccluskey@puc.nh.gov
F.Ross@puc.nh.gov
RegionalEnergy@puc.nh.gov

#### Vermont

The Honorable Peter Shumlin Office of the Governor 109 State Street, Pavilion Montpelier, VT 05609 elizabeth.miller@state.vt.us

Jeb.Spaulding@state.vt.us

Vermont Public Service Board 112 State Street Montpelier, VT 05620-2701 mary-jo.krolewski@state.vt.us

Vermont Department of Public Service

112 State Street, Drawer 20 Montpelier, VT 05620-2601 bill.jordan@state.vt.us chris.recchia@state.vt.us Ed.McNamara@state.vt.us

#### Massachusetts

The Honorable Deval Patrick Office of the Governor Rm. 360 State House Boston, MA 02133

Massachusetts Department of Public Utilities One South Station Boston, MA 02110 John.j.keene@state.ma.us

## **Rhode Island**

The Honorable Lincoln Chafee Office of the Governor State House Room 115 Providence, RI 02903 <u>Marion.Gold@energy.ri.gov</u> <u>CKearns@doa.ri.gov</u> <u>Danny.Musher@energy.ri.gov</u>

Rhode Island Public Utilities Commission 89 Jefferson Blvd.
Warwick, RI 02888
Sscialabba@ripuc.state.ri.us
nucci@puc.state.ri.us
Proberti@puc.state.ri.us
egermani@puc.state.ri.us

#### Connecticut

The Honorable Dannel P. Malloy Office of the Governor State Capitol 210 Capitol Ave. Hartford, CT 06106 Liz.Donohue@ct.gov Andrew.McDonald@ct.gov Paul.Mounds@ct.gov

#### New England Governors, State Utility Regulators and Related Agencies\*

Connecticut Public Utilities Regulatory Authority 10 Franklin Square New Britain, CT 06051-2605 brenda.henderson@po.state.ct.us robert.luysterborghs@po.state.ct.us

# New England Governors, Utility Regulatory and Related Agencies

Anne Stubbs Coalition of Northeastern Governors 400 North Capitol Street, NW Washington, DC 20001 coneg@sso.org

Heather Hunt, Executive Director New England States Committee on Electricity 655 Longmeadow Street Longmeadow, MA 01106 HeatherHunt@nescoe.com

Sarah Hofman, Executive Director New England Conference of Public Utilities Commissioners 50 State Street – Suite 1 Montpelier, VT 05602 director@necpuc.org

John Betkoski, President New England Conference of Public Utilities Commissioners 10 Franklin Square New Britain, CT 06051-2605 John.betkoski@po.state.ct.us

Harvey L. Reiter, Esq.
Counsel for New England Conference of Public Utilities Commissioners, Inc.
c/o Stinson Morrison Hecker LLP
1150 18th Street, N.W., Ste. 800
Washington, DC 20036-3816
HReiter@stinson.com