



February 22, 2010

VIA HAND DELIVERY

The Honorable Kimberly D. Bose, Secretary
The Honorable Nathaniel J. Davis, Sr., Deputy Secretary
Federal Energy Regulatory Commission
Room 1A-East, First Floor
888 First Street, N.E.
Washington, D.C. 20426

Re: ISO New England Inc. and New England Power Pool, Docket No. ER10-____-000, Various Revisions to FCM Rules Related to FCM Redesign

Dear Secretary Bose and Deputy Secretary Davis:

Pursuant to Section 205 of the Federal Power Act (“FPA”),¹ the February 13, 2009 Order Accepting Tariff Revisions and Requiring Compliance Filing in Docket No. ER09-356-000 (“February 13 Order”),² and Section III.13.2.5.2.5(f) of the Tariff,³ ISO New England Inc. (the “ISO”) and the New England Power Pool (“NEPOOL”) Participants Committee (together, the “Filing Parties”) hereby submit to the Federal Energy Regulatory Commission (“FERC” or “Commission”) further revisions to the Forward Capacity Market (“FCM”) rules (collectively referred to as “Rule Changes”). The Filing Parties request an effective date of April 23, 2010 for the Rule Changes.

I. INTRODUCTION

A. Background

The Rule Changes presented here address concerns from several different sources. On December 1, 2008, the Filing Parties submitted a filing styled *Various Revisions to FCM Rules Related to Bilateral Contracts and Reconfiguration Auctions* in Docket No. ER09-356-000 (“FCM Phase II Filing”). In that filing, the Filing Parties identified certain issues with the FCM design that required further attention, such as application of the Transmission Security Analysis

¹ 16 U.S.C. § 824d (2006).

² *ISO New England Inc. and New England Power Pool Participants Committee*, 126 FERC ¶ 61,115 (2009).

³ Capitalized terms used but not otherwise defined in this filing have the meanings ascribed thereto in the ISO’s Transmission, Markets and Services Tariff (FERC Electric Tariff No. 3) (the “Tariff”). Section III of the Tariff is Market Rule 1.

and its parameters, how Capacity Zones and Local Sourcing Requirements are established, and aligning the standards to be used in establishing those zones and requirements with those used in performing reliability reviews.⁴ The Filing Parties proposed a stakeholder process, to begin in the first quarter of 2009, to address these additional issues related to the FCM, culminating in the instant filing.⁵

In June of 2009, the ISO's Internal Market Monitor issued its initial assessment of the Forward Capacity Market, which was required under Section 13.8.4 of Market Rule 1.⁶ At the request of state regulators, the region subsequently created the Forward Capacity Market Working Group ("FCM Working Group"), which was chaired by representatives from NEPOOL, the New England Conference of Public Utility Commissioners ("NECPUC") and the ISO, to provide a stakeholder forum specifically constructed for the consideration of FCM design changes. The FCM Working Group assumed responsibility for reviewing all open FCM issues and assessing which issues could be addressed in time for a February 20 filing. With the assistance of Ms. Cynthia Marlette from the Commission, the FCM Working Group considered the issues identified in the FCM Phase II Filing, other issues of concern to Participants, and the conclusions reached by the ISO's Internal Market Monitor.

In its report on the FCM auction results and design elements, the Internal Market Monitor found that the FCM has met its overall objective for the first two commitment periods by procuring the capacity needed by the region for those periods.⁷ Based on its analysis, the Internal Market Monitor provided recommendations for certain improvements to the FCM. Specific recommendations include addressing the reliability criteria used for determining capacity zones and evaluating de-list bids, modifying the Alternative Capacity Price Rule ("APR"), and changing the use of the Cost of New Entry ("CONE") in determining the starting price for each Forward Capacity Auction ("FCA").⁸ This filing addresses each of the major recommendations of the Internal Market Monitor.

The FCM Working Group also considered recommended rule changes related to the APR as required by Section III.13.2.5.2.5(f) of the Tariff. That section requires the ISO to "evaluate, in consultation with NEPOOL stakeholders and state utility regulatory agencies, whether to modify the treatment of de-list bids rejected for reliability reasons . . . including but not limited to an evaluation of the application of the Alternative Capacity Price Rule, or similar mechanism, to FCAs affected by de-list bids rejected for reliability reasons."⁹ Section III.13.2.5.2.5(f) requires a filing to be made regarding the results of that evaluation by May 17, 2010.¹⁰ The Rule

⁴ FCM Phase II Filing transmittal letter at pp. 4-5.

⁵ *Id.*

⁶ Internal Market Monitoring Unit Review of the Forward Capacity Market Auction Results and Design Elements, ISO New England Inc. Market Monitoring Unit (June 5, 2009) ("Internal Market Monitor Report"), available at http://www.iso-ne.com/markets/mktmonmit/rpts/other/fcm_report_final.pdf.

⁷ *Id.* at p. 1.

⁸ *Id.* at pp. 4-8.

⁹ Tariff Section III.13.2.5.2.5(f).

¹⁰ *See ISO New England Inc. and New England Power Pool, Limited Revision to FCM Rules to Extend Date for Filing Regarding Treatment of De-list Bids Rejected for Reliability Reasons*, Docket No. ER08-952-000 (filed

Changes presented here include several new APR mechanisms, discussed further below, that are designed to account for rejected de-list bids, and hence the instant filing discharges the requirements of Section III.13.2.5.2.5(f).¹¹

In support of the Rule Changes, the ISO provides herewith the Prepared Testimony of Robert G. Ethier, Vice President of Market Development for the ISO, which is Attachment 3 to this letter, and Mark G. Karl, Senior Director of Resource Adequacy for the ISO, which is Attachment 4 to this letter. Also attached is the Prepared Testimony of David LaPlante, Vice President of Market Monitoring for the ISO, which is Attachment 5 to this letter. All Prepared Testimonies are solely sponsored by the ISO and not NEPOOL.

This filing is the result of extensive work by the FCM Working Group, the ISO, NEPOOL and other stakeholders, and is supported by the ISO and NEPOOL (with votes of 70.1% and 71.69% in favor). NECPUC was actively involved in discussions in the FCM Working Group and the NEPOOL committees and indicated its support for the Rule Changes as approved by the NEPOOL Participants Committee. NEPOOL notes that individual Participants have many reasons for taking the positions they have on this package of changes and as such, some Participants may wish to provide further comments to the Commission on these Rules Changes.

The Rule Changes provide improved design of some market elements, and additional detail and refinement to a number of related areas of the FCM rules, as described below.¹² The Filing Parties believe that the Rule Changes detailed in this filing significantly improve the existing FCM rules. Nevertheless, the Filing Parties recognize that this filing does not resolve all the major issues regarding the FCM design, particularly in light of the scope and timing of the just-completed process. In this regard, a number of Participants have sought input from the External Market Monitor on the APR, and zonal formation, and other parties seek further discussion on APR pricing and the definition of out-of-market capacity. Accordingly, a stakeholder process will be commenced as soon as practicable to continue to examine these important issues, as discussed in more detail below.

B. Overview of the Rule Changes

1. Revisions to the Alternative Capacity Price Rules

The APR was included in the FCM design to ensure that the Capacity Clearing Price in the FCA reflects the cost of new entry and to help prevent out-of-market or “OOM” capacity

May 14, 2008) (“FCM Rules Date Extension Filing”); Letter Order re: Limited Revision to FCM Rules, Docket No. ER08-952-000 (June 10, 2008) (“Letter Order re. FCM Rules Date Extension Filing”).

¹¹ If the Commission approves the Rule Changes, the ISO will delete this section of the tariff in a later, clean-up filing.

¹² As required by Order 719, the ISO has provided an estimate of the cost impact of the rule changes related to the alternative capacity price rule. That estimate can be found on the ISO’s website at http://www.iso-ne.com/committees/comm_wkgrps/othr/fcmwg/mtrls/2009/oct292009/iso_fcm_brif_discuss_draft.pdf and http://www.iso-ne.com/committees/comm_wkgrps/othr/fcmwg/mtrls/2009/oct292009/apr_risk%20prem_draft_disc.pdf

from artificially depressing market prices.¹³ Generally, capacity is considered out-of-market if it participates in the FCA at prices below the resource's long-run average cost net of non-FCA market revenues.¹⁴ Unless the auction clearing price is administratively adjusted when OOM capacity dominates, the resulting price distortions could lead to inefficient entry and exit decisions.¹⁵ In the longer term, absent an effective APR, the market is likely to be perceived as more risky, causing new entrants to require a risk premium and imposing unnecessary costs on consumers.¹⁶ Under the current FCM rules, the APR can only be triggered when new capacity is required in the FCA (*i.e.*, existing capacity is less than the projected capacity requirement).¹⁷ However, in determining whether new capacity is required, the current rule fails to account for Permanent De-List Bids and Non-Price Retirement Requests that clear in the current FCA, and also does not count de-list bids and Non-Price Retirement Requests rejected for reliability reasons as OOM Capacity, even though those resources have the same effect on the Capacity Clearing Price as OOM Capacity.¹⁸

In addition, there are two other circumstances in which triggering an alternative capacity price may be warranted. First, an alternative price may be warranted where no new capacity is required in the FCA to meet the projected capacity requirement, but where OOM capacity from previous FCAs affects the current Forward Capacity Auction. Second, an alternative price may be warranted where no new capacity is required and the rejection of de-list bids for reliability reasons affects the current FCA.¹⁹ To improve the existing Alternative Capacity Price Rule and to address these additional circumstances, the FCM rules are being expanded to include three distinct alternative capacity price rules. The currently existing APR will now be referred to as "APR-1," and the two new provisions described above will be referred to as "APR-2" and "APR-3," respectively.²⁰ Moreover, the three APR mechanisms are non-overlapping, such that only one of the mechanisms could be triggered in each Capacity Zone in any FCA.²¹ The APR-related Rule Changes are described in Section IV.A, below.

2. Increased Transparency in the Review of Offers below 0.75 times CONE

The market rules pertaining to review by the Internal Market Monitor of offers from New Generating Capacity Resources and New Demand Resources below 0.75 times CONE are being

¹³ Attachment 3, Prepared Testimony of Robert G. Ethier ("Ethier Testimony") at pp. 3-4.

¹⁴ Examples of out-of-market resources include resources that may be contracted by states or be self supplied by load-serving entities. These resources typically are built by a party with a contract that ensures full payment for the resource regardless of the level of FCM prices, and can therefore be offered into the Forward Capacity Auction at very low prices.

¹⁵ Ethier Testimony at p. 4.

¹⁶ *Id.*

¹⁷ Tariff Section III.13.2.7.8.1.

¹⁸ Ethier Testimony at pp. 4-5, 7-8.

¹⁹ This is the issue described in Tariff Section III.13.2.5.2.5(f) of the currently-effective FCM rules.

²⁰ See Attachment 1, revised Tariff Sections III.13.2.7.8.1., III.13.2.7.8.2, and III.13.2.7.8.3.

²¹ Ethier Testimony at p. 5.

revised to add important details.²² The FCM rules require the Internal Market Monitor to determine whether an offer below 0.75 times CONE is consistent with the long run average costs of the resource, taking into account the expected net revenues other than capacity revenues.²³ The Rule Changes include several clarifications regarding what items shall be included in the analysis as “expected net revenues.” Specifically, Sections III.13.1.1.2.6 and III.13.1.4.2.4(b) are being revised to provide that the Internal Market Monitor will consider certain reductions in costs in determining expected net revenues. In addition, the definition of expected net revenues is limited to net revenues that are broadly tradable and available to all resources of the same physical type throughout the New England region.²⁴ The Rule Changes also provide that expected net revenues shall include economic development incentives that are offered broadly by state or local governments and that are not expressly intended to reduce prices in the Forward Capacity Market.²⁵ As discussed further below, these rules will not change the determination of whether a specific project is found to be in-market or out-of-market because the Internal Market Monitor already implements the current tariff consistent with these clarifications.²⁶ While they provide more detail concerning the out-of-market determinations in the current rule, they do not change the current Tariff’s basic principle that differentiates out-of-market capacity from in-market capacity.²⁷

Finally, the Rule Changes provide for the inclusion of certain information regarding the Internal Market Monitor’s determinations with respect to each offer below 0.75 times CONE (including both those ultimately determined to be in-market and those determined to be out-of-market) in the informational filing made in advance of the FCA pursuant to Section III.13.8.1(a). These Rule Changes are described in Section IV.B, below.

3. Extension of the Floor Price

Section III.13.2.7.3 of the FCM rules provides for a “Capacity Clearing Price Collar” to be effective for the first three successful FCAs. This collar consisted of a floor price of 0.6 times CONE and a price ceiling of 1.4 times CONE.²⁸ Having now conducted three successful FCAs, this provision expires.²⁹ The Rule Changes include an extension of the 0.6 times CONE floor price for an additional three FCAs.³⁰ A key rationale for extending the current floor price was for a transition mechanism to address the impact of OOM resources that cleared in the first three FCAs.³¹ Those resources contribute to the current surplus in the region, and there is

²² Attachment 1, revised Tariff Section III.13.1.1.2.6, III.13.1.4.2.4(b).

²³ *See, e.g.*, Tariff Section III.13.1.1.2.6.

²⁴ Attachment 1, revised Tariff Section III.13.1.1.2.6, III.13.1.4.2.4(b)..

²⁵ *Id.*

²⁶ *See* Attachment 5, Prepared Testimony of David LaPlante (“LaPlante Testimony”) at p.3-4.

²⁷ *Id.*

²⁸ Tariff Section III.13.2.7.3.

²⁹ *Id.*

³⁰ Attachment 1, revised Tariff Section III.13.2.7.1.

³¹ Ethier Testimony at pp. 19-20.

considerably more installed capacity in New England than required to meet the projected Installed Capacity Requirement for the next several FCAs.³² This surplus will exert downward pressure on future auction prices.³³ Since OOM Capacity from the first three FCAs will continue to exert downward pressure on prices in future FCAs, it is appropriate to maintain the floor while load growth and retirements work to offset the OOM capacity.³⁴ An extension of the floor price is a reasonable compromise which balances an appropriate desire to address the effect of past OOM activity, while recognizing that the OOM entry was treated appropriately by the rules in effect at that time.³⁵

The Filing Parties also note that while they are not proposing to extend the ceiling price of 1.4 times CONE, the operation of the starting price in a descending clock auction functions as an upper limit on auction prices. These Rule Changes are described in detail in Section IV.C below.

4. Compensation where a Resource's Prorating Election is Rejected for Reliability Reasons

In Section III.13.2.7.3(b)(iv), the Rule Changes specify that, for FCAs subject to the floor price, resources denied megawatt prorating as a result of a reliability review will be compensated at the level of the Capacity Clearing Price, with an associated cost allocation to Network Load in the affected Reliability Region.³⁶ When a resource is denied megawatt prorating for reliability reasons, it is compensated today at a lower per megawatt rate than other resources that are allowed megawatt prorating receive.³⁷ Given the experience with the reliability evaluations of pro-rationing requests, the Rule Changes provide for paying such resources the clearing price for all obligated megawatts during the floor price extension. This Rule Change is described below in Section IV.D.

5. Decoupling the Forward Capacity Auction Starting Price from CONE

Under the current FCM rules, the Forward Capacity Auction Starting Price for a Capacity Zone is set at two times CONE.³⁸ In its Report, the Internal Market Monitor recommended that the auction starting price should be separated from the other uses of CONE.³⁹ In particular, the Internal Market Monitor recommended that the auction starting price should be decoupled from CONE and set at a level high enough to ensure that both generation and demand will enter and create a competitive auction.⁴⁰ Under the Rule Changes, the Forward Capacity Auction Starting

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.* at p. 20.

³⁶ Attachment 1, revised Tariff Section III.13.2.7.3.(b)(iv).

³⁷ Tariff Section III.13.2.7.3.(b).

³⁸ Tariff Section III.13.2.4(a).

³⁹ Internal Market Monitor Report at p. 8.

⁴⁰ *Id.*

Price will continue to be set at two times the applicable CONE, as it is under the current market rules,⁴¹ for three more FCAs.⁴² However, the starting price for the FCA for each Capacity Zone for the Capacity Commitment Period beginning on June 1, 2016 will be set to \$15/kW-month.⁴³ Thereafter, the Forward Capacity Auction Starting Price will be adjusted annually using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs.⁴⁴ This change is described in Section IV.E below.

6. Determination of CONE

CONE is calculated pursuant to the existing formula in the FCM rules at Section III.13.2.4 (generally, 70% of the CONE from the previous FCA plus 30% of the Capacity Clearing Price from the previous FCA).⁴⁵ CONE, however, is not updated if any of a list of conditions is met, including, notably, when new entry is not required in the FCA.⁴⁶ In that case, under the current rules, the CONE value is carried forward to the next FCA.⁴⁷ In order to avoid the CONE becoming “stale”, the Rule Changes provide that when CONE is not updated using the 70 / 30 formula (*i.e.*, when FCAs occur without the need for new capacity or if any of the other enumerated conditions are met), it will be adjusted using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs.⁴⁸ The revised rules also clarify that the CONE for the fourth FCA is \$4.918/kW-mo, the same as that used in the third FCA, and that the first application of the Handy-Whitman Index would not occur until after the fourth FCA.⁴⁹ The \$4.918/kW-month is the same amount as was used for the third FCA,⁵⁰ and is the same as it would have been under the existing rules (the value did not change from the third FCA to the fourth FCA because there was no new capacity required in the third FCA). The Rule Changes add the \$4.918/kW-mo CONE value to the FCM rules for clarity.⁵¹ Finally, the Rule Changes add to the enumerated list of conditions under which the 70 / 30 formula will not be applied and instead, the CONE value is carried forward to the next FCA, and adjusted using the Handy-Whitman Index of Public Utility Construction Costs as described above. Specifically, the Rule Changes add to this enumerated list instances where the price is set pursuant to the Capacity Clearing Price Floor described in Section III.13.2.7.3 or pursuant to one of the Alternative

⁴¹ Tariff Section III.13.2.4(a).

⁴² Attachment 1, revised Tariff Section III.13.2.4(a).

⁴³ *Id.*

⁴⁴ The ISO expects to file additional detail on the appropriate Handy-Whitman Index to rely upon for FCM inflation adjustments in the upcoming Omnibus 6 filing.

⁴⁵ *See* Tariff Section III.13.2.4(b).

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ Attachment 1, revised Tariff Section III.13.2.4.

⁴⁹ *Id.*

⁵⁰ Forward Capacity Auction Results Filing, Docket No. ER10-186-000 (filed October 30, 2009), transmittal letter at p. 3.

⁵¹ Ethier Testimony at p. 23.

Capacity Price Rules described in Section III.13.2.7.8. This change is described in Section IV.F below.

7. Clarifications Regarding ISO Requests for Energy

Section III.13.6.4 of the FCM rules currently states that “[t]he ISO may request that a 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 to provide energy from that capacity, and shall not be subject to any availability penalties for failure to provide energy from that capacity.” The Rule Changes clarify that where the ISO requests energy from a resource that does not have a Capacity Supply Obligation, such resource shall not be obligated under Section III.13 of the Tariff by such a request to provide energy, and shall not be subject to any availability penalties under Section III.13 of the Tariff by such a request for failure to provide energy from that capacity.⁵² This change is described at Section IV.G, below.

8. Calculation of Zonal Requirements

The Rule Changes revise the methodology for calculating the Local Sourcing Requirements (“LSR”) for import-constrained Capacity Zones.⁵³ These revisions harmonize the use of the local resource adequacy criteria currently used to determine the LSR for Capacity Zones and the transmission security criteria that the ISO uses to maintain system operational reliability when reviewing de-list bids for the FCA. Since the system must meet both resource adequacy and transmission security requirements, the Rule Changes provide that both resource adequacy and transmission security based requirements will be developed for each import-constrained zone.⁵⁴ Specifically, the Rule Changes calculate the LSR for an import-constrained Zone as the amount of capacity needed to satisfy “the higher of” (i) the Local Resource Adequacy Requirement, or “LRA” or (ii) the Transmission Security Analysis Requirement, or “TSA.”⁵⁵

As noted above, under the current Tariff language the LSR is calculated using only the resource adequacy criteria.⁵⁶ Under the Rule Changes, the ISO will continue to calculate a zonal requirement using resource adequacy criteria but the requirement is renamed as the Local Resource Adequacy Requirement.⁵⁷ The term Local Sourcing Requirement is retained under the Rule Changes, but the term Local Sourcing Requirement will refer to the higher of the Local

⁵² Attachment 1, revised Tariff Section III.13.6.4.

⁵³ The ISO notes that the Rule Changes pertain only to import-constrained Load Zones. For export-constrained Load Zones, each export-constrained Load Zone is modeled as a separate Capacity Zone in the Forward Capacity Auction. *See* Tariff Section III.12.4(a). The ISO is not proposing any change to these provisions.

⁵⁴ *See* Attachment 1, revised Tariff Sections III.12.2.1 and III. 12.2.1.2.

⁵⁵ *Id.*

⁵⁶ *See* Tariff Section III.12.2.1.

⁵⁷ *See* Attachment 1, revised Tariff Sections III.12.2.1 and III. 12.2.1.2.

Resource Adequacy Requirement and the requirement using the Transmission Security Analysis.⁵⁸ This change is described at Section IV.H, below.

9. Improved Modeling of Capacity Zones

The Rule Changes include several revisions intended to allow for improved modeling of Capacity Zones. Under the current tariff provisions, import-constrained Capacity Zones are modeled *before* each auction only if the aggregate supply within a particular zone is less than or equal to its LSR.⁵⁹ Therefore, when the capacity in a potential import-constrained Capacity Zone exceeds the LSR *prior to the auction*, the current rules do not model that Capacity Zone in the auction. Stated differently, when the capacity in a potential Capacity Zone exceeds the LSR, the current FCA rules do not provide a means to model a Capacity Zone and determine a separate zonal price if resources within the modeled Capacity Zone de-list *during* the auction.

First, in evaluating possible changes to better model Capacity Zones in the auction and to provide a greater probability of capacity substitutability from a reliability perspective, the ISO examined, with input from the Reliability Committee,⁶⁰ different options for modeling Capacity Zones. It was determined that energy Load Zones should be used as the initial point of evaluation of potential Capacity Zones to be modeled. However, as described in Mr. Karl's testimony, in the event that transmission limitations develop such that there are intra-zonal constraints, the subdivision of an energy Load Zone would be allowed, subject to certain limitations.⁶¹ The ISO will determine the transmission transfer limits, if any, between each energy Load Zone and the adjacent zones. If a discrete transmission transfer limit cannot be determined, such as might happen where there are multiple interconnections between zones or complex embedded constraints across or within zones, no LSRs will be calculated for the zone(s) with the indeterminate limit(s). The zone(s) with the indeterminate limit(s) will be consolidated into the adjacent zone, to form a single zone which in most cases will be Rest-of-Pool.⁶²

Second, the ISO explored whether more bids should be considered in the modeling of Capacity Zones. The main determinant to identify whether a Capacity Zone should be modeled is whether the total amount of capacity that is projected to be installed (minus any Export Bids or Administrative Export De-List Bids)⁶³ in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period *is greater than* that Load Zone's forecasted LSR. The Rule Changes will allow Non-Price Retirement Requests, Permanent De-List Bids, Static De-List Bids from non-Pivotal Suppliers, Export Bids from non-Pivotal Suppliers, and Administrative Export De-List Bids from non-Pivotal Suppliers to be included in the calculation to determine whether to model a Capacity Zone for the FCA under certain conditions.⁶⁴ In the

⁵⁸ *Id.*

⁵⁹ See Tariff Section III.12.2.1.

⁶⁰ These discussions were part of the Local Sourcing Requirement-transmission security analysis stakeholder process that included various presentations at the Reliability Committee from May 2009 through October 2009.

⁶¹ Attachment 4, Prepared Testimony of Mark G. Karl ("Karl Testimony") at p. 4.

⁶² See Attachment 1, revised Tariff Sections III.12.4(d).

⁶³ See Tariff Section III.12.4(b).

⁶⁴ Attachment 1, revised Tariff Section III.12.4.

event that an import constrained capacity zone is not modeled under Section III.12.4(b)(ii) (this section reflects for the most part the existing tariff provisions), the ISO will perform the analysis again but will exclude the additional capacity amounts associated with the requests and bids mentioned above (*i.e.*, Non-Price Retirement Requests, Permanent De-List Bids, Static De-List Bids from non-Pivotal Suppliers, Export Bids from non-Pivotal Suppliers, and Administrative Export De-List Bids from non-Pivotal Suppliers). The ISO believes that the exclusion of additional capacity associated with such bids will result in lower or the same projected capacity in the zone and, therefore, allow for more accurate modeling of separate capacity zones (as compared to the existing provisions). This is appropriate since these bidders are expressing that, at certain price levels, they do not intend to obtain a Capacity Supply Obligation. There are corresponding Rule Changes in Section 13 of the Tariff regarding when the descending clock auction stops in a capacity zone.

The Rule Changes summarized above and discussed in more detail below in Section IV are consistent with and support the FCM design. The Rule Changes submitted by the Filing Parties are just and reasonable, and should be approved by the Commission.

C. Future Stakeholder Discussions and Commitments

The ISO and stakeholders continue to believe that further improvements to the design of the FCM are possible as we collectively gain more experience with the market's operation. As a result, the ISO believes that future stakeholder processes will continue to consider how to improve the FCM and, among other issues, consider further refining the definition of OOM resources, when the APR should be triggered and how the price should be set under the APR. The ISO will retain an economic consultant to assist it and the stakeholders concerning these issues. The economic consultant will also consider approaches that allow reliance on auction prices rather than administrative price setting, wherever that is reasonably possible. The ISO will periodically discuss with stakeholders the efforts of the economic consultant prior to the conclusion of any engagement. Within 18 months of this filing, the ISO will make a filing with the Commission, either proposing rules which have been developed or reporting on the status of discussions and progress on these matters.⁶⁵ Any such status report will address whether, how, and when issues raised by the economic consultant and considered in the stakeholder process relating to the matters outlined above will be addressed and resolved.

The ISO intends to treat the 18 month timeframe described above as an outer limit on the stakeholder process to address these important issues. The ISO believes that it is desirable and possible to complete this process in less time, and will work in good faith to that end. However, there are important variables that will ultimately determine how quickly these issues can be addressed – specifically, the reviews by the External Market Monitor and the conclusions of the economic consultant, described above and immediately below.

Subsequent to the Participants Committee vote on the Rule Changes, two letters were sent to David Patton, the External Market Monitor for the ISO, requesting that he review the

⁶⁵ NEPOOL notes that while such commitment had been discussed with stakeholders, particularly at the NEPOOL Markets Committee, and several Participants have noted support for such commitment, NEPOOL itself as an organization has not provided, or been asked to provide, any formal input on the timing or scope of this filing.

APR and zone changes contained in the Rule Changes and provide his opinion on their adequacy. Recommendations resulting from these reviews will be addressed as appropriate.

As noted above, with regard to the differences in the TSA standards used to review de-list bids and the standards currently used to establish LRA Requirements, the Rule Changes provide that the Local Sourcing Requirement for an import-constrained Zone is the amount of capacity needed to satisfy “the higher of” the TSA or the LRA analysis. The ISO notes that if the TSA deterministic requirement continues to exceed over time the LRA probabilistic requirement in determining whether to model zones,⁶⁶ the ISO commits to work with stakeholders in the future on possible alternative solutions which might prove more effective and efficient for the markets and customers in the long-run.

Also, the ISO commits to study the contribution that resources without a Capacity Supply Obligation make to system reliability. The ISO will collect data on the participation in the energy market of resources without a Capacity Supply Obligation for the first two Capacity Commitment Periods and will discuss the data with stakeholders and whether further action is appropriate.

In addition, the ISO will enhance the Regional System Planning process to consider: the impact of proposed transmission topology changes on zonal configuration and requirements; identification of emerging issues that may require changes in zonal configuration; identification of effective solutions to local security and reliability needs; and projections of zonal configurations under alternate expansion strategies.

II. DESCRIPTION OF THE FILING PARTIES AND 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 ISO New England Transmission, Markets and Services 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 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 420 members. The participants include all of the electric utilities rendering or receiving service under the Tariff, as well as independent power generators, marketers, load aggregators, brokers, consumer-owned utility systems, end users, developers, demand resource providers, and a merchant transmission

⁶⁶ LRA probabilistic requirement is based on a Loss of Load Expectation (“LOLE”) of disconnecting non-interruptible customers no more than once every ten years (or an annual LOLE of 0.1).

provider. Pursuant to revised governance provisions accepted by the Commission,⁶⁷ 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.”

Correspondence and communications in this proceeding should be addressed to:

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⁶⁷ *ISO New England Inc. et al.*, 109 FERC ¶ 61,147 (2004).

⁶⁸ 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.

III. STANDARD OF REVIEW

The ISO submits these revisions pursuant to Section 205 of the FPA, which “gives a utility the right to file rates and terms for services rendered with its assets.”⁶⁹ Under Section 205, the Commission “plays ‘an essentially passive and reactive’ role”⁷⁰ whereby it “can reject [a filing] only if it finds that the changes proposed by the public utility are not ‘just and reasonable.’”⁷¹ 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.”⁷² The changes filed herein “need not be the only reasonable methodology, or even the most accurate.”⁷³ As a result, even if an intervenor or the Commission develops an alternate proposal, the Commission must accept this Section 205 filing if it is just and reasonable.⁷⁴

IV. DISCUSSION OF FORWARD CAPACITY MARKET RULE CHANGES

A. Revisions to the Alternative Capacity Price Rules

One of the FCM design goals is to ensure that the FCA clearing price reflects the market cost of new entry when new entry is needed. When significant quantities of OOM resources clear in the FCA and new entry is needed, the clearing price may not reflect the cost of new competitive resources because new resources are completely displaced by OOM resources that are willing to offer into the FCA at a price well below the cost of new resources supported only by market revenues. The Alternative Capacity Price Rule was included in the market design to help prevent OOM resources from setting artificially low prices in the FCA. Out-of-market resources are those that participate in the FCA at prices below the resource’s long-term average cost net of non-FCA market revenues because they are able to count on revenues from non-market sources. For example, they may be built by a party with a contract that ensures full payment for the resource regardless of the level of FCM prices. Thus, in-market resource behavior in the FCA is based on costs and expectations of future market-based revenues, while OOM resources are able to count on additional, often resource-specific revenues and thereby stay in the auction at relatively low prices. As explained by Mr. Ethier, in the longer term, this could

⁶⁹ *Atlantic City Elec. Co. v. FERC*, 295 F. 3d 1, 9 (D.C. Cir. 2002).

⁷⁰ *Id.* at 10 (quoting *City of Winnfield v. FERC*, 744 F. 2d 871, 876 (D.C. Cir. 1984)).

⁷¹ *Id.* at 9.

⁷² *Cities of Bethany, Bushnell et al. v. FERC*, 727 F. 2d 1131, 1136 (D.C. Cir.), *cert. denied*, 469 U.S. 917 (1984) (“*Cities of Bethany*”); see also *ISO New England Inc.*, 114 FERC ¶ 61,315 at P 33 and n.35 (2005), citing *Pub. Serv. Co. of New Mexico v. FERC*, 832 F. 2d 1201, 1211 (10th Cir. 1987) and *Cities of Bethany* at 1136.

⁷³ *Oxy USA, Inc. v. FERC*, 64 F. 3d 679, 692 (D.C. Cir. 1995) (citing *Cities of Bethany* at 1136).

⁷⁴ *Cf. Southern California Edison Co., et al.*, 73 FERC ¶ 61,219 at 61,608 n.73 (1995) (“Having found the Plan to be just and reasonable, there is no need to consider in any detail the alternative plans proposed by the Joint Protesters.”) (citing *Cities of Bethany* at 1136).

raise FCM prices, as existing resources may leave the market and new resources will not enter without a substantial premium to compensate for the price volatility created by OOM entry.⁷⁵

Currently, the Alternative Capacity Price Rule is triggered, and the price is adjusted to a level that better reflects the cost of new entry, only when three conditions are met: (1) new capacity is needed, (2) there is not Inadequate Supply in the FCA,⁷⁶ and (3) the amount of cleared OOM Capacity exceeds the amount of new capacity needed. When all of these conditions are met, the Alternative Capacity Price Rule is triggered as a post-auction price adjustment. The Alternative Capacity Price Rule raises the Capacity Clearing Price to the lesser of CONE or the price at which the last new capacity resource withdrew from the auction minus \$0.01.

The Rule Changes concerning the Alternative Capacity Price Rule make two adjustments to the current rule, which is identified in the revised FCM rules as “APR-1,” and address two additional situations (identified in the Rule Changes as “APR-2” and “APR-3”) that may inappropriately depress auction clearing prices and that are not properly dealt with in the current market rules. The adjustments to APR-1 (the APR as it exists in the currently-effective FCM rules) are to account for Permanent De-List Bids clearing in the FCA and to treat de-list bids and Non-Price Retirement Requests that are rejected for reliability reasons as OOM Capacity. The two additional situations that are not addressed in the current FCM rules are as follows. First, an alternative price may be warranted where no new capacity is required in the FCA to meet the projected capacity requirement but new capacity would be required but for the out-of-market capacity from previous FCAs affecting the current FCA. Second, an alternative price may be warranted where the rejection of de-list bids for reliability reasons affects the current FCA. The three Alternative Capacity Price Rule mechanisms are non-overlapping, such that only one of the mechanisms could be triggered in each Capacity Zone in any FCA.

Under the Rule Changes contained in Section III.13.2.7.8 of Market Rule 1, in no case will the application of any of the three Alternative Capacity Price Rule mechanisms result in lowering the Capacity Clearing Price that otherwise results from the FCA. As explained in Mr. Ethier’s testimony, the Alternative Capacity Price Rule was designed to address circumstances when the capacity price was artificially depressed by OOM capacity.⁷⁷ Further decreasing the price would be inappropriate. However, an explicit provision stating that the APRs cannot lower the clearing price was necessary because there are certain unlikely and unusual circumstances under which the APR rules might strictly require that the capacity price be lowered. This could occur, for example, if CONE were relatively low, the auction naturally cleared above CONE, and

⁷⁵ Ethier Testimony at pp. 3-4.

⁷⁶ Inadequate Supply is described in Section III.13.2.8.1 of the Tariff. Generally, an import-constrained Capacity Zone will be considered to have Inadequate Supply if at the Forward Capacity Auction Starting Price the amount of capacity offered in the import-constrained Capacity Zone through New Capacity Offers is less than the amount of New Capacity Required in that Capacity Zone. Section III.13.2.8.1.1. The New England Control Area will be considered to have system-wide Inadequate Supply if at the Forward Capacity Auction Starting Prices, the total amount of capacity offered in the Forward Capacity Auction is less than the Installed Capacity Requirement (net of HQICCs). Tariff Section III.13.2.8.1.2.

APR-1 was triggered. In that circumstance, the lower of the last new resource to leave the FCA and CONE would be CONE, which would also be lower than the unadjusted FCA clearing price.

1. APR-1

APR-1 is a revised version of the Alternative Capacity Price Rule as it currently exists in Section III.13.2.7.8.1, which applies when new capacity is required. The first modification to this alternative pricing provision (in addition to renaming it as “APR-1”) is the inclusion of cleared Permanent De-List Bids in the trigger conditions. As currently written, APR-1 can only be triggered when the amount of New Capacity Required is greater than zero. New Capacity Required, however, is calculated prior to the FCA by, generally, comparing the amount of installed capacity to the forecasted capacity requirement. If the forecasted requirement is larger than the installed amount, then new capacity is required. The trigger for APR-1 should also, however, factor in the effects of Permanent De-List Bids clearing in the FCA. The quantity of Permanent De-List Bids clearing in the FCA will have the effect of reducing the amount of installed capacity for the relevant Capacity Commitment Period, but this reduction is not accounted for in the calculation of New Capacity Required, because the amount of Permanent De-List Bids clearing in the FCA is not known at the time it is calculated. To address this potential gap, the trigger conditions of APR-1 are being revised to add the quantity of Permanent De-List Bids clearing in the FCA to the New Capacity Required.

In addition, under the Rule Changes, units that have certain de-list bids or retirement requests rejected for reliability reasons will be taken into account in triggering APR-1. Specifically, Permanent De-List Bids and Non-Price Retirement Requests that are rejected for reliability reasons will be included in the calculation of OOM Capacity for the purpose of determining whether the APR will be triggered. These resources have the same effect on FCA clearing prices as OOM resources. As was noted above, the ISO, NEPOOL, and state utility regulatory agencies were required pursuant to Section III.13.2.5.2.5(f) of the Tariff to evaluate whether to apply the Alternative Capacity Price Rule to FCAs affected by de-list bids rejected for reliability reasons. This issue was first identified in the development of the original FCM rules.⁷⁸ The treatment of de-list bids rejected for reliability reasons is also addressed under APR-3, below, and in each instance such bids are treated as OOM Capacity because the effect on the Capacity Clearing Price is comparable.

There is no change to the pricing provisions in the current APR. If APR-1 is triggered in a Capacity Zone, then under Section III.13.2.7.8.1.2 the Capacity Clearing Price in that Capacity Zone will generally be the lesser of: (i) \$0.01 below the price at which the last new resource that is not OOM Capacity to withdraw withdrew from the FCA; or (ii) CONE.

2. APR-2

APR-2 is a new provision that is designed to account for situations in which out-of-market capacity in previous FCAs may eliminate the need for new capacity, and hence depress

⁷⁸ Ethier Testimony, pp. 4-6.

the price, in a subsequent FCA. In particular, the current rule does not address situations where, because a sufficiently large amount of OOM resources cleared in prior FCAs, the auction clearing price reflects that no new capacity is needed. APR-2 is designed to trigger the administrative pricing provisions to reflect the cost of new capacity that would have been needed but for the OOM resources that cleared in prior FCAs. For example, if 1,000 MW of OOM resources clear in a FCA when the need for new capacity is only 400 MW, and ICR growth for the next FCA is 500 MW, the OOM resources that cleared in the first FCA would completely eliminate the need for new capacity in the second FCA. The current Alternative Capacity Price Rule would adjust the price in the first FCA, but would not address the price distortions introduced in the second FCA by the OOM resources. Under the Rule Change found in Section III.13.2.7.8.2.1, APR-2 is triggered when: (i) no new capacity is required (that is, the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the FCA in the Capacity Zone is less than or equal to zero); (ii) there is not Inadequate Supply; and (iii) at the Capacity Clearing Price, the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the FCA plus the amount of Carried Forward Excess Capacity in the Capacity Zone is greater than zero.⁷⁹

Carried Forward Excess Capacity is a new term introduced for use in determining whether APR-2 is triggered. Carried Forward Excess Capacity will include two primary elements, each of which requires some explanation. The first element comprising Carried Forward Excess Capacity is Carried Forward Excess Out-of-Market Capacity. The inclusion of this element was prompted by the Internal Market Monitor's recommendation that the Alternative Capacity Price Rule triggering conditions should be modified to properly account for multi-year effects of OOM resources. As noted above, the quantity of OOM resources clearing in a single year may be sufficiently large to prevent new entry from setting the Capacity Clearing Price in subsequent years. The current rules provide for administrative pricing in the FCA when new OOM resources prevent new entrants from setting the clearing price in that year. Thus, under the current rules, a large OOM resource that clears in an FCA may trigger the Alternative Capacity Price Rule in the year that it initially clears. However, there is no provision in the current rules to account for the impact of this OOM capacity in subsequent FCAs even though that large OOM resource may continue to satisfy what would otherwise have been a need for new capacity. Hence, in subsequent years, that large OOM resource may continue to depress FCA clearing prices. The inclusion of Carried Forward Excess Out-of-Market Capacity in the triggering conditions of APR-2 is intended to address this issue.

The amount of Carried Forward Excess Out-of-Market Capacity for the first three Capacity Commitment Periods entering the fourth FCA shall be considered zero (*i.e.*, there shall be no retroactivity in its application).⁸⁰ Thereafter, the amount of Carried Forward Excess Out-of-Market Capacity in an FCA shall depend on characteristics of the previous FCA. If in the previous FCA, the sum of the amount of New Capacity Required and the amount of cleared Permanent De-List Bids is *greater than zero*, then the Carried Forward Excess Out-of-Market

⁷⁹ It should be noted that under Section III.13.2.7.8.2, New Capacity Required can be a negative value.

⁸⁰ As explained in Mr. Ethier's testimony, as a general matter it is preferable to only apply rule changes on a prospective basis to minimize market uncertainty. Moreover, if the carry-forward rules had been in effect, resources that did not properly support their offers below 0.75 times CONE may have been motivated to provide additional data to support their offers and thereby may have not been considered OOM in the first instance. pp. 9-10.

Capacity will be the difference between the amount of OOM Capacity in the previous FCA and the sum of the amount of New Capacity Required and the amount of Permanent De-List Bids clearing in that previous FCA. If in the previous FCA, the sum of the amount of New Capacity Required and the amount of cleared Permanent De-List Bids is *less than or equal to* zero, however, then the Carried Forward Excess Out-of-Market Capacity will be the sum of the amount of OOM Capacity in the previous FCA plus the lesser of: (i) the Carried Forward Excess Out-of-Market Capacity from the previous FCA; and (ii) the absolute value of the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the previous FCA. In no case will Carried Forward Excess Out-of-Market Capacity be less than zero.

The Rule Changes provide, regarding the calculation of Carried Forward Excess Out-of-Market Capacity under Section III.13.2.7.8.2(c)(i), that past excess OOM Capacity shall not carry forward for more than six years, such that it will apply in no more than seven FCAs. The six year carry-forward limit reflects a concern that, should load growth be zero or negative over an extended period of time, setting an administrative Capacity Clearing Price that reflects the cost of new entry that is triggered by OOM activity far in the past would not provide a useful or accurate price signal to potential entrants in the capacity market. Similar limits on the application of out-of-market remedies are in place in the NYISO capacity market.⁸¹ The seven auction limit was derived from calculating the length of time, based on projected load growth in New England, that it would take for the total quantity of OOM resources from the first three FCAs to be exceeded by load growth. This is a reasonable estimate of a sufficient time period that will allow OOM resources to have a high probability of triggering APR-2 as appropriate, and yet provide certainty to the market and avoid setting an administrative price to no purpose. While the ISO evaluated calculating a year-specific limit after each FCA as is done under the NYISO rules, it believes that the added implementation complexity and associated difficulties for auction participants would outweigh the benefits of a year-specific calculation. Instead the Rule Changes impose a limit applicable to all years that balances clarity and simplicity with ensuring that APR-2 is triggered when appropriate.

The second element comprising Carried Forward Excess Capacity is capacity carried forward due to rationing. The current FCM rules already recognize (at Section III.13.2.7.9) that where excess capacity is procured in an FCA as a result of the rationing rules,⁸² it could impact pricing in a subsequent FCA. The Rule Changes eliminate Section III.13.2.7.9 but retain this concept by incorporating (at Section III.13.2.7.8.2.1(c)(ii)) such excess capacity into the quantity of Carried Forward Excess Capacity, and hence into the determination of whether APR-2 is triggered. The Rule Changes delete the old capacity carry-forward rule (Section III.13.2.7.9) because it is appropriate to consider capacity carried forward due to rationing as part of the revised alternative capacity pricing mechanism, which now includes a similar carry-forward provision, rather than separately.

⁸¹ The New York Independent System Operator Market Administration and Control Area Services Tariff, Sections 5.12.1, 5.12.2.

⁸² Tariff Section III.13.2.6.

The same pricing provisions as APR-1 (and hence in the currently-effective Alternative Capacity Price Rule) will also apply when APR-2 is triggered. Thus, if APR-2 is triggered in a Capacity Zone, then under Section III.13.2.7.8.2.2 the Capacity Clearing Price in that Capacity Zone will generally be the lesser of: (i) \$0.01 below the price at which the last new resource that is not OOM Capacity to withdraw withdrew from the FCA; or (ii) CONE.

3. APR-3

APR-3 is a new provision designed to account for rejected de-list bids, an issue identified in the development of the original FCM rules, which the Commission has directed be addressed in a filing with FERC by May 17, 2010 and which has been discussed among the FCM Working Group.⁸³ As noted above in the discussion of APR-1, de-list bids rejected for reliability reasons have a similar impact on the Capacity Clearing Price as OOM Capacity. De-list bids rejected for reliability reasons distort the competitive supply curve by, in effect, replacing relatively high priced capacity with zero priced capacity. APR-3 is necessary to ensure that de-list bids rejected for reliability do not inefficiently depress the FCA clearing price in circumstances where new capacity is not required and de-list bids are expected to determine the FCA price. Rejected de-list bids depress the clearing price because, under the current market rules, when the resource is not allowed to exit the market it is retained in the auction at essentially a zero price. Thus, a resource that might have submitted a price of \$5/kW-mo is retained in the FCA at \$0/kW-mo.

New APR-3, as described in Tariff Section III.13.2.7.8.3, addresses these situations where new entry is not needed, and therefore a de-list bid from an existing resource would generally be expected to set the FCA price, but this price is depressed by de-list bids that are rejected for reliability reasons and retained in the FCA below their de-list bid prices. In particular, APR-3 removes the resource with the rejected de-list bid from the supply curve for the purpose of determining the FCA clearing price.

Like APR-2, for APR-3 to be triggered, the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the FCA in the Capacity Zone must be less than or equal to zero and there must not be Inadequate Supply in the FCA.⁸⁴ Unlike APR-2, however, the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the FCA plus the amount of Carried Forward Excess Capacity in the Capacity Zone must be less than or equal to zero. Furthermore, APR-3 also requires that one or more Non-Price Retirement Requests or de-list bids was rejected in the instant FCA for reliability reasons pursuant to Section III.13.2.5.2.5. If all of these conditions are met, then the Capacity Clearing Price in that Capacity Zone will be determined under the formula described in Section III.13.2.7.8.3.2. That formula is designed to treat the Non-Price Retirement Requests and de-list bids that were rejected for reliability reasons as though they were accepted for purposes of setting the auction price.

⁸³ See Tariff Section III.13.2.5.2.5(f). See also FCM Rules Date Extension Filing; Letter Order re: FCM Rules Date Extension Filing. This filing, if accepted by the Commission, discharges this requirement.

⁸⁴ See Attachment 1, revised Tariff Section III.13.2.7.8.3.1.

APR-3, however, introduces a complication. Specifically, by removing resources with rejected de-list bids from the supply curve, resource owners may be more likely to attempt to affect the FCA clearing price by de-listing. Market power is an important concern under APR-3 because APR-3 increases the potential rewards for submitting a de-list bid for resources that have a non-zero probability of being rejected for reliability. By increasing the attractiveness of de-listing for these resources, it is more likely that a resource will try to de-list uneconomically. First, there are already strong incentives for resources that are certain they are needed for reliability to de-list at the highest possible price. The resource owner would seek the higher of the de-list bid price and the market clearing price. Thus, a resource owner seeking to affect the FCA clearing price could reduce the expected cost of removing capacity from the market by de-listing a resource with a relatively high probability of being rejected for reliability. If the resource were needed for reliability, it would both be paid a rate above the market price and would have removed that capacity from the market. To address this market power concern, the application of APR-3 is limited to prices of 0.6 times CONE and below. This reflects both experience in the first three FCAs, as described further below, and the logic that low-priced de-list bids are more likely to reflect true going forward costs. Thus, the 0.6 times CONE ceiling on the application of APR-3 is designed to provide a protection against the exercise of market power by not allowing APR-3 to be triggered above that price.

The 0.6 times CONE level is based on experience with de-list bids in the first three FCAs. There have been relatively few megawatts of rejected de-lists in the first three FCAs,⁸⁵ all of which concluded at or above 0.6 times CONE. And in none of these FCAs would the megawatts of rejected de-list bids have equaled or exceeded the excess supply in the FCA at prices at or above 0.6 times CONE. Based on this experience, it is reasonable to project that there will be little or no harm in not applying APR-3 at price levels above 0.6 times CONE.⁸⁶ Because the incentives to de-list will be higher under the Rule Changes, without the 0.6 time CONE limit there would be a risk of an increased volume of de-list bids at prices above 0.6 times CONE once this rule is implemented. Hence, application of this rule must be limited to prices below 0.6 times CONE. However, the 0.6 times CONE level should be revisited after further experience is gained.

B. Increased Transparency in the Review of Offers below 0.75 times CONE

⁸⁵ The megawatts of rejected de-list bids in each of the first three Forward Capacity Auctions were: first Forward Capacity Auction: two Dynamic De-List Bids were rejected (Norwalk Harbor 1 (162 MW) & Norwalk Harbor 2 (168 MW) for a total of 330 MW, however, in May 2009, after further review and pursuant to Section m.13.2.5.2.5, the ISO agreed to allow Norwalk Harbor 2 to de-list); second Forward Capacity Auction: no de-list bids were rejected (0 MW); third Forward Capacity Auction: two Static De-List Bids were rejected (Salem Harbor 3 (150 MW) & Salem Harbor 4 (431 MW) for a total of 581 MW.

The first three Forward Capacity Auctions presented the following megawatt values of excess capacity at 0.6 CONE (the auction closing price) at the end of each round: first Forward Capacity Auction excess = 1,772 MW; second Forward Capacity Auction excess = 4,755 MW; third Forward Capacity Auction excess = 5,030 MW. These excess capacity values reflect the total cleared capacity minus the net Installed Capacity Requirement, capped by the Real Time Emergency Generation (“RTEG”) limit of 600 MW, pursuant to Section III.13.2.3.3(f) of the Tariff. See Forward Capacity Auction Results Filing, Docket No. ER08-633-000 (filed March 3, 2008); Forward Capacity Auction Results Filing, Docket No. ER09-467-000 (filed December 23, 2008); Forward Capacity Auction Results Filing, Docket No. ER10-186-000 (filed October 30, 2009).

⁸⁶ Ethier Testimony at pp. 18-19.

The market rules provisions pertaining to review by the Internal Market Monitor of offers from New Generating Capacity Resources and New Demand Resources below 0.75 times CONE are being clarified in the Rule Changes.⁸⁷ These provisions are important because they set forth the approach to be followed by the Internal Market Monitor in determining whether an offer should be deemed out of market for purposes of triggering the APR. To this end, as required in currently effective Section III.13.1.1.2.6, the Internal Market Monitor “shall determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues other than capacity revenues.” “Expected net revenues” are revenues that are factored into substantiating a resource’s capacity market offer, and which appropriately reduce a resource’s offer in the capacity market.

The Rule Changes provide important additional details regarding what will be considered expected net revenues. Specifically, for purposes of determining whether an offer is consistent with the long run marginal costs of the resource net of expected revenues other than capacity revenues, the Internal Market Monitor under Sections III.13.1.1.2.6 and III.13.1.4.2.4(b) will consider reductions in costs in identifying expected net revenues. The Rule Changes in those sections also provide that expected net revenues will only include net revenues that are: (i) tradable throughout the New England Control Area or not restricted to resources within a particular state or other geographic sub-region; and (ii) available to all resources of the same physical type within the New England Control Area, regardless of the resource owner.⁸⁸ Finally, the Rule Changes provide that expected net revenues may include economic development incentives that are offered broadly by state or local government and that are not expressly intended to reduce prices in the FCM. These changes provide additional detail to make the determination of whether the offer is consistent with the long run average costs of a resource net of expected net revenues other than capacity revenues. However, as explained in Mr. LaPlante’s testimony, these rules will not change the determination of whether a specific project is found to be in-market or out-of-market.⁸⁹ While these rule changes provide more detail concerning the out-of-market determinations in the current rule, they do not change the current Tariff’s basic principle that differentiates out-of-market capacity from in-market capacity. This additional detail in the Rule Changes will increase market transparency and provide a framework for improved reporting, as discussed below.

The Rule Changes also include changes to Section III.13.8.1 (“Filing of Certain Determinations Made By the ISO Prior to the FCA and Challenges Thereto”) to require reporting of certain information regarding offers from new resources submitted at prices below 0.75 times CONE.⁹⁰ Generally, Section III.13.8.1 requires the ISO, no later than 90 days prior to the first day of each FCA, to file an informational filing describing the ISO’s determinations with respect to that FCA and to provide supporting documentation for such determinations. The Rule Changes add to this requirement the reporting of the Internal Market Monitor’s determinations regarding each offer below 0.75 times CONE (including all offers determined by the Internal Market Monitor to be in-market as well as out-of-market), including information regarding each

⁸⁷ Tariff Sections III.13.1.1.2.6, III.13.1.4.2.4(b).

⁸⁸ Tariff Sections III.13.1.1.2.6, III.13.1.4.2.4(b).

⁸⁹ LaPlante Testimony at pp. 3-4.

⁹⁰ Attachment 1, revised Tariff Section III.13.8.1(a)(vii). *See also*, Tariff Section III.13.1.2.3.2.1.1.

of the elements considered in the Internal Market Monitor's determination of expected net revenues (other than revenues from ISO-administered markets) and whether that element was included or excluded in the determination of whether the offer is consistent with the resource's long run average costs net of expected revenues other than capacity revenues.⁹¹ These Rule Changes were drafted in response to a desire for better information and reporting to stakeholders, and provide additional detail and granularity to the existing rules.

C. Extension of the Floor Price

Section III.13.2.7.3 of the Forward Capacity Market rules provides for a "Capacity Clearing Price Collar" to be effective for the first three successful FCAs. This collar consisted of a floor price of 0.6 times CONE and a price ceiling of 1.4 times CONE. Having now conducted three successful FCAs, this provision expires. The Rule Changes include an extension of the 0.6 times CONE floor price for an additional three FCAs (those associated with the Capacity Commitment Periods beginning on June 1, 2013, June 1, 2014, and June 1, 2015). A key rationale for extending the floor price is to address the OOM resources that cleared in the first three FCAs. Those resources contributed to the excess capacity in New England and have had a downward effect on expected future prices. An extension of the floor price is appropriate given the fact that OOM capacity from the first three FCAs will not be included as Carried Forward Excess Out-Of-Market Capacity in the new APR-2 provisions. The new APR-2 provision is triggered by OOM from prior FCAs, but the calculation of Carried Forward Excess Capacity does not include Carried Forward Excess Out-of Market Capacity from the first three FCAs. Since OOM Capacity from the first three FCAs will not be included as OOM in the new APR provisions, it is appropriate to maintain the floor while that OOM capacity erodes through load growth and retirement. Moreover, an extension of the floor price is a reasonable compromise which balances an appropriate desire to address the effect of past OOM activity, while recognizing that the OOM entry was treated appropriately by the rules in effect at that time. Some Participants that supported the Rule Changes also stated other reasons for extending the price floor, including, among others, to prevent undue disruption of the market, to protect the emerging demand response industry, and/or to reduce the likelihood of reliance on Reliability Agreements for resources whose de-list bids are rejected for reliability reasons.

D. Compensation where a Resource's Prorationing Election is Rejected for Reliability Reasons

The Rule Changes also include revisions to the megawatt prorationing election at Section III.13.2.7.3(b). In Section III.13.2.7.3(b)(iv), the Rule Changes specify that, for FCAs subject to the floor price, resources denied megawatt prorationing as a result of a reliability review will receive compensation based on the Capacity Clearing Price, with an associated cost allocation to Network Load in the affected Reliability Region. Specifically, it provides that where prorationing is rejected for reliability reasons, the resource's payment shall not be prorated based on the total number of megawatts of capacity clearing in the FCA. The difference between its actual payment based on the Capacity Clearing Price and what its payment would have been had prorationing not been rejected for reliability reasons will be allocated to Network Load within the affected Reliability Region. Thus, the total payment born by load will increase accordingly

⁹¹ See LaPlante Testimony at p. 5.

as each megawatt denied the opportunity to prorate will be paid the Capacity Clearing Price. The Rule Changes are intended to compensate megawatts that are deemed necessary for reliability at a price level equal to that received by the other resources providing capacity that are not specifically needed for reliability. In making this change, the Rule Change eliminates, on a prospective basis, a recurring contention by certain Participants that resources denied megawatt prorationing on the basis of reliability are treated unfairly and that this treatment is inconsistent with the compensation extended to resources denied de-listing for reliability reasons in the FCA.⁹²

E. Decoupling the Forward Capacity Auction Starting Price from CONE

Under the current FCM rules, the Forward Capacity Auction Starting Price for a Capacity Zone is set at two times CONE.⁹³ In its Report, the Internal Market Monitor stated that the starting FCA price should be separated from the other uses of CONE.⁹⁴ According to the Internal Market Monitor, generally, the starting price for a descending-clock auction should be set high to attract enough participation for a competitive auction.⁹⁵ Too low a starting price increases the risk of short supply and a failed auction. The starting price for the first FCA, according to the Internal Market Monitor, was set at \$15.00/kW-month based on a CONE of \$7.50/kW-month.⁹⁶ The original CONE value was based on the best estimate at the time of the revenues a new peaking unit would need to recover from the capacity market. The first two auctions closed at the floor price and each included over 2,000 MW of demand resources. The CONE now stands at \$4.918/kW-month, which is significantly below most estimates of the cost of new entry for generating resources. If the CONE does not increase because no new capacity is needed, the auction starting price would stay at \$9.836/kW-month.

Since it appears that there are significant differences between the prices at which new demand resources and new generation resources stay in the auction, the Internal Market Monitor recommended that the auction starting price should be decoupled from the CONE and set at a level high enough to ensure that both generation and demand will enter and create a competitive auction. Under the Rule Changes, the Forward Capacity Auction Starting Price for the Capacity Commitment Periods beginning on June 1, 2013, June 1, 2014, and June 1, 2015 will continue to be two times the CONE applicable to each Capacity Zone. The Starting Price for the FCA for the Capacity Commitment Period beginning on June 1, 2016 will be \$15/kW-month, which is a fixed amount not based on CONE. Thereafter, the Forward Capacity Auction Starting Price will

⁹² Megawatt prorationing has been a controversial issue in several proceedings before the Commission. *See, e.g.,* ISO New England Inc.'s Forward Capacity Auction Results Filing, Docket No. ER10-186-000 (filed October 30, 2009); ISO New England Inc.'s Motion for Leave to Answer and Answer to Comments and Protests Regarding Forward Capacity Auction Results Filing, Docket No. ER10-186-000 (filed January 7, 2010); ISO New England Inc. and New England Power Pool Participants, 130 FERC ¶ 61,105 (2010) at P 90.

⁹³ Tariff Section III.13.2.4(a).

⁹⁴ Internal Market Monitor Report at p. 53.

⁹⁵ *Id.*

⁹⁶ *Id.*

be adjusted annually using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs.⁹⁷

The higher starting price of \$15/kW-month will be implemented coincident with the expiration of the floor price extension. This timing was supported by NEPOOL. Given the current excess supply of capacity in New England and the continued participation of new resources at the current auction starting price of 2.0 times CONE, the ISO believes that implementation of the revised auction starting price after the sixth FCA will not affect the auction results in the next three FCAs. In any event, the ISO could not implement the higher starting price prior to the fifth FCA.

In addition, because the Forward Capacity Auction Starting Price will no longer be synonymous with 2.0 times CONE, it was necessary to change references from 2.0 times CONE to the starting price (or vice versa) in a number of instances. These Rule Changes can be found at Attachment 1, revised Tariff Sections III.13.1.2.2.5.2, III.13.1.2.3.1.3, III.13.1.2.3.2.1.2, III.13.1.2.3.2.4, and III.13.1.4.8.1.

F. Determination of CONE

CONE is calculated pursuant to the existing formula in the rules at Section III.13.2.4 (generally, 70% of the CONE from the previous FCA plus 30% of the Capacity Clearing Price from the previous FCA). CONE, however, is not updated if any of a list of conditions is met, including, notably, when new entry is not required in the FCA. In that case, under the current rules, CONE is simply carried forward unaltered to the next FCA. The Rule Changes provide that when CONE is not updated using the 70 / 30 formula, it will be adjusted using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs. Updating CONE in this way prevents CONE from becoming “stale” in the event that multiple FCAs occur without the need for new capacity (or if any of the other enumerated conditions are met) and CONE is not thereby updated pursuant to the formula. The revised rules also clarify that the CONE for the fourth FCA is \$4.918/kW-mo, the same as that used in the third FCA, and that the first application of the Handy-Whitman Index would not occur until after the fourth FCA. The \$4.918/kW-month is the same amount as was used for the third FCA, and is the same as it would have been under the existing rules (the value did not change from the third FCA to the fourth FCA because there was no new capacity required in the third FCA). The specific value was added to the FCM rules for clarity.

As was mentioned above, the 70 / 30 CONE formula is circumvented if any of several enumerated conditions are met. The Rule Changes add an important element to the enumerated list of conditions, namely, where the FCA price is set administratively pursuant to the floor described in Section III.13.2.7.3 or pursuant to any of the Alternative Capacity Price Rules described in Section III.13.2.7.8. The floor provisions and CONE adjustment provisions contained in existing Section III.13.2.4(a), which were applicable for the first three FCAs, have been deleted in the instant filing and replaced with Section III.13.2.7.3(c)(i) to the enumerated

⁹⁷ The Filing Parties note that an additional rule change is necessary to add detail regarding the appropriate Handy-Whitman index to rely upon for inflation adjustments. This detail change will be included in a package of rule changes to be filed later in 2010.

list of conditions when CONE is not updated using the 70 / 30 CONE formula. The calculation of CONE was designed to be updated after each FCA by incorporating the clearing price determined by new entry. In cases when the price is administratively set at the floor or through the APR, CONE is carried forward from the previous FCA and is adjusted for inflation using the Handy-Whitman Index. It is appropriate to not update CONE using the 70/30 formula when the price is administratively set by the floor because such a price is inconsistent with the purpose of CONE, which is to reflect the market-determined cost-of-new entry. As such, an administrative floor price should not be included in the CONE calculation.

G. Clarifications Regarding ISO Requests for Energy

Under existing Section 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. This provision reflects the intent of the market design to procure an amount of capacity equal to the Installed Capacity Requirement and for the Installed Capacity Requirement to reflect the region’s anticipated capacity needs, and not to rely on unobligated resources to meet these needs. Nonetheless, under existing Section III.13.6.4 of Market Rule 1, the ISO may:

request that a 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 that resource is not obligated to provide energy from that capacity, and will not incur availability penalties for failure to provide energy. 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.

The Rule Changes simply add a few clarifying words to this section, to the effect that where the ISO requests energy from unobligated capacity, the 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.⁹⁸ This additional language simply clarifies that the provision is intended to address only obligations or penalties under Section III.13 of the Tariff.

H. Calculation of Zonal Requirements

As noted earlier, the ISO committed in the FCM Phase II Filing to work with stakeholders to review how to harmonize the local resource adequacy criteria used to determine the resource adequacy requirement and the criteria used in the transmission security analyses that the ISO uses to maintain system reliability when reviewing de-list bids for the FCA. Since the system must meet both resource adequacy and transmission security requirements, the Rule Changes provide that both resource adequacy and transmission security based requirements be

⁹⁸ See Attachment 1, revised Tariff Section III.13.6.4 (“ISO Requests for Energy”).

developed for each import-constrained zone.⁹⁹ Specifically, under the Rule Changes the Local Sourcing Requirement will be calculated for an import-constrained Zone as the amount of capacity needed to satisfy “the higher of” the (i) the Local Resource Adequacy Requirement,¹⁰⁰ or (ii) the Transmission Security Analysis.¹⁰¹

The calculation of the Local Resource Adequacy Requirement largely is the same analysis contained in existing Tariff Section III.12.2.1 with the term “Local Resource Adequacy Requirement” replacing “Local Sourcing Requirement.”¹⁰² Under the Rule Changes, the term Local Sourcing Requirement will continue to be used, but it will now refer to “the higher of” the LRA Requirement, or the TSA requirement. As with the previous tariff language, the LRA Requirement is a local zonal capacity requirement calculated using a probabilistic modeling technique that ensures the zone meets the one-day-in-ten years reliability standard. However as described in the testimony of Mark Karl,¹⁰³ the input assumptions of the LRA have been changed to only include the contribution of resources sufficient to meet the ICR requirement, rather than all interconnected resources.

The Rule Changes describe the calculation of the TSA requirement in Section III.12.2.1. The TSA results in a local zonal capacity requirement calculated using deterministic transmission load flow analyses that are focused on ensuring that the identified zone will have sufficient resources to operate the transmission system securely following selected contingency events.¹⁰⁴ Specifically, the TSA uses a series of transmission load flow studies aimed at determining the performance of the system under future stressed conditions and develops a resource requirement sufficient to allow the system to operate through the stressed situation.¹⁰⁵

While the TSA for each potential Capacity Zone will be set at a level sufficient to cover most reasonably anticipated events, it will not be set at a level high enough to guarantee that every combination of obligated resources within the zone will meet system needs.¹⁰⁶ The TSA is the same analysis that the Commission permitted the ISO to rely upon for the reliability review of de-list bids.¹⁰⁷ In addition, prior to establishing the Forward Capacity Market, the TSA was historically used to determine whether a reliability agreement was appropriate for a resource.¹⁰⁸

⁹⁹ The ISO notes that the Rule Changes pertain only to import-constrained Load Zones. For export-constrained Load Zones, each export-constrained Load Zone is modeled as a separate Capacity Zone in the Forward Capacity Auction. *See* Tariff Section III.12.4(a). The ISO is not proposing any change to these provisions.

¹⁰⁰ *See* Attachment 1, revised Tariff Sections III.12.2.1 and III. 12.2.1.1.

¹⁰¹ *Id.* at revised Tariff Sections III.12.2.1 and III. 12.2.1.2.

¹⁰² *Id.* at revised Tariff Sections III.12.2.1.1.

¹⁰³ *See* Attachment 4, Prepared Testimony of Mark G. Karl at pp. 12-14.

¹⁰⁴ *See* Attachment 1, revised Tariff Section III. 12.2.1.2.

¹⁰⁵ *Id.* at revised Tariff Section III.12.2.1.2 (a).

¹⁰⁶ *Id.* at Tariff Section III.12.2.1.2 (b). If the Transmission Security Analysis requirement is consistently above the LRA planning criterion over time, the ISO will consider with stakeholders whether alternative designs are warranted.

¹⁰⁷ *See* the Commission’s June 20, 2008 Order in Docket No ER08-633-000, *ISO New England Inc.*, 123 FERC ¶ 61,290 at PP 26-31 (2008). The Commission stated:

In proposing to calculate the Local Sourcing Requirement for import-constrained potential Capacity Zones using a “higher of” approach, the Rule Changes revise certain input assumptions in the TSA analyses. The changes in the input assumptions involve: (i) reducing a discount factor used to determine forced outage assumptions for peaking generation (thermal quick-start units) from 33% to 20%;¹⁰⁹ and (ii) including Real-Time Emergency Generator responses in the TSA.¹¹⁰ These changes are intended to increase the level of consistency between the LRA and TSA requirement calculations and better account for the capacity that has an obligation to the New England markets in the TSA analyses. The ISO will periodically review the appropriateness of the assumptions for both Local Resource Adequacy and Transmission Security Analysis with the Reliability Committee, and is committed to continuing to refine the determination of Local Sourcing Requirement if necessary.¹¹¹

I. Improved Modeling of Capacity Zones

In discussing possible improvements to the modeling of Capacity Zones both before and during the FCA, the ISO explored: (a) various zonal definitions for use as the starting point for initially-modeled Capacity Zones in the FCA; and (b) whether more bids should be considered in order to allow for additional modeling of Capacity Zones during a FCA. Each aspect of the ISO’s proposal is discussed below.

1. The Initial Capacity Zones

The ISO explored a variety of zonal definitions to be used as the foundational or initially-modeled Capacity Zones in the FCA. The ISO’s review included consideration of the use of

Implementing the February 2008 Forward Capacity Auction, ISO-NE properly relied on both transmission system security and resource adequacy criteria. NPCC defines reliability as having two elements: system security and resource adequacy. In essence, system security is “the ability of the system to withstand disturbances,” whereas resource adequacy “represents the ability of the system to meet the aggregate power and energy requirement of all consumers at all times.

Id. at P 26.

¹⁰⁸ In the ISO’s filing of the results of the first Forward Capacity Auction, ISO-witness Stephen J. Rourke explained that a Transmission Security Analysis was part of the methodology and criteria previously used to determine whether a reliability agreement was needed. *See* testimony of Stephen J. Rourke at 6 contained in the March 3, 2008 ISO filing in Docket No. ER08-633-000. The Commission accepted the ISO’s filing on June 20, 2008. *See ISO New England Inc.*, 125 FERC ¶ 61,290 at P 31 (2008).

¹⁰⁹ The forced outage assumptions for peaking generation resources are calculated using a deterministic adjustment factor based on the operational experience of ISO-NE. As noted by Mr. Karl, based on observed improvements in the starting reliability of peaking resources, the ISO is proposing to reduce the deterministic discount factor applied to peaking resources from 33% to 20%. *See* Karl Testimony at p.14.

¹¹⁰ The response from Real Time Emergency Generators previously was not included in the TSA analysis. Due to changes to ISO emergency procedures that improve the ability of ISO to rely upon Real-Time Emergency Generator resources, these resources will be included in the deterministic analysis. *See* Karl Testimony at p.14.

¹¹¹ As noted earlier, if the TSA deterministic requirement continues to exceed over time the LRA probabilistic requirement in determining whether to model zones, the ISO commits to work with stakeholders in the future on possible alternative solutions which might prove more effective and efficient for the markets and customers in the long-run.

reliability regions,¹¹² load zones,¹¹³ reserve zones,¹¹⁴ dispatch zones,¹¹⁵ and the concept of a “pure” capacity reliability zone.¹¹⁶ As a final outcome, the Rule Changes provide that the existing energy market Load Zones and/or their subdivision be used as the basis for modeling potential Capacity Zones in the FCA.

There are several benefits of using the existing energy market Load Zones as the basis for potential Capacity Zones in the FCA. The use of the existing energy market Load Zones: (a) avoids the creation of another zonal system in the ISO markets; (b) conforms to existing ISO settlement systems and trading patterns; (c) ensures that Capacity Zones will not cross state or utility boundaries; and (d) partially coincides with the electrical boundaries of what could be considered “pure” capacity reliability zones.¹¹⁷

In addition, in the event transmission limitations develop such that intra-zonal constraints must be modeled in the FCA, any necessary subdivision of an energy Load Zone into one or more potential Capacity Zones will be allowed. Such subdivision will respect the energy Load Zone boundaries and, to the extent possible, the state retail electric service territories.¹¹⁸

Prior to establishing zonal capacity requirements, transfer limits must be calculated between adjacent potential Capacity Zones. If an energy Load Zone and/or its subdivision is neither export-constrained nor import-constrained, it will be consolidated into the modeled Rest-of-Pool (“ROP”) Capacity Zone.¹¹⁹ In the event a discrete transfer limit cannot be determined, the potential Capacity Zone with the indeterminate limit will also be consolidated into the modeled ROP Capacity Zone.¹²⁰

To maintain the stability of the initially-modeled Capacity Zones, the Capacity Zones modeled in each FCA will be the same as those modeled in subsequent Reconfiguration Auctions associated with the same Capacity Commitment Period. Capacity Zones will only be modified

¹¹² A “Reliability Region” is defined as “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.” See Section I.2.2 of Market Rule 1 (definitions).

¹¹³ A “Load Zone” is defined as “a Reliability Region, except as otherwise provided for in Section III.2.7 of Market Rule 1.” See Section I.2.2 of Market Rule 1 (definitions).

¹¹⁴ A “Reserve Zone” is defined as determined in accordance with Section III.2.7 of Market Rule 1.

¹¹⁵ A “Dispatch Zone” is defined as 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.” See Section I.2.2 of Market Rule 1 (definitions).

¹¹⁶ A “pure” capacity reliability zone is defined as geographic region within which resources have a very high probability of substitutability. This concept was introduced to the Reliability Committee at the August 28, 2009 meeting. Materials are available at http://www.iso-ne.com/committees/comm_wkgrps/relbly_comm/relbly/mtrls/2009/aug282009/index.html.

¹¹⁷ “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. Tariff Section III.1.3.2 (definitions).

¹¹⁸ See Attachment 1, revised Tariff Section III.12.4(e).

¹¹⁹ *Id.* at revised Tariff Section III.12.4(c).

¹²⁰ *Id.* at revised Tariff Section III.12.4(d).

in response to material changes in system topology that significantly impact capacity resource substitutability.¹²¹ Changes to Capacity Zones may occur only between each FCA.

2. Allowing Additional Types of Bids to Be Considered in the Formation of Capacity Zones During the Forward Capacity Auction

Under the current tariff provisions, import-constrained capacity zones are modeled *before* each auction and are allowed to price-separate and form Capacity Zones in the auction if the aggregate supply curve within a particular zone is less than or equal to its Local Sourcing Requirement. Therefore, when the capacity in a potential Capacity Zone exceeds the Local Sourcing Requirement *prior to the auction*, that Capacity Zone is not modeled for use in the auction. Stated differently, when the capacity in a potential Capacity Zone exceeds the Local Sourcing Requirement, the current FCA rules do not provide a means to model a Capacity Zone and determine a separate zonal price if resources within the modeled Capacity Zone de-list *during* the auction. To the extent possible given concerns about the exercise of market power, resources successfully de-listing in the FCA, however, should be permitted to affect price separation among Capacity Zones because it enables the FCA prices to more accurately reflect the capacity situation in the commitment period.

To remedy this situation, the Rule Changes will allow Non-Price Retirement Requests,¹²² Permanent De-List Bids,¹²³ Static De-List Bids from non-Pivotal Suppliers,¹²⁴ Export Bids from non-Pivotal Suppliers,¹²⁵ and Administrative Export De-List Bids from non-Pivotal Suppliers¹²⁶ to be considered in the modeling of an Import-Constrained Capacity Zone for the instant FCA.¹²⁷ Resources that submit successful de-list bids as described above cannot be relied upon during the commitment period and therefore should not be included as capacity in a zone when deciding whether to include a zone in the auction is being modeled.

¹²¹ *Id.* at revised Tariff Section III.12.4(f). ISO expects that a system topology change that causes interface limits to change by a significant amount would trigger a review of the initially-modeled Capacity Zones.

¹²² A “Non-Price Retirement Request” is a binding request to retire the entire capacity of a Generating Capacity Resource as described in Tariff Section III.13.1.2.3.1.5.

¹²³ A “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 Tariff Section III.13.1.2.3.1.2.

¹²⁴ A “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 Tariff Section III.13.1.2.3.1.1.

¹²⁵ An “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 Tariff Section III.13.1.2.3.1.3.

¹²⁶ An “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 Tariff Section III.13.1.2.3.1.4.

¹²⁷ For the Rule Changes related to Permanent De-List Bids, Static De-List Bids from non-Pivotal Suppliers, Export Bids from non-Pivotal Suppliers, and Administrative Export De-List Bid from non-Pivotal Suppliers, *see* revised Tariff Section III.12.4.(b)(iii). For the tariff changes related to Non-Price Retirement Requests, *see* revised Tariff Section III.12.4.(b)(i).

The creation of Capacity Zones in the FCA is important because it enables import-constrained zones that have insufficient capacity to separate from the rest of the region in the FCA and have higher prices when necessary to attract new resources or retain existing resources. Thus, ensuring that zones are created appropriately in the FCA enables the auction to set prices that reflect the locational value of capacity. This will improve the efficiency of the wholesale electricity market by sending accurate price signals that promote efficient investment decisions by potential new entrants to enter the market, and decisions by existing resources to leave the market. Over the long term, this improved market efficiency should help improve the reliability of the bulk power system.

The Filing Parties support allowing Non-Price Retirement Requests, Permanent De-List Bids, Static De-List Bids from non-Pivotal Suppliers, Export Bids from non-Pivotal Suppliers, and Administrative Export De-List Bids from non-Pivotal Suppliers, to be considered in the modeling and pricing of Capacity Zones in the instant FCA because they will result in more efficient prices in the auctions. However, the benefits of more efficient pricing must be balanced against the risk of the exercise of market power by those submitting these offers. Some Participants noted their support for this allowance based in part on a belief that such revisions would lessen the need for Reliability Agreements for resources whose de-list bids are rejected for reliability reasons. In proposing these Rule Changes, the ISO believes that these resources will be bid competitively rather than in a way that reflects an attempt to exercise market power. The Internal Market Monitor Report recommended allowing Permanent De-List Bids to affect the creation and pricing of zones in the FCA to improve zonal price formation.¹²⁸ Permanent De-List Bids, once cleared, prevent a resource from participating in any future FCA. According to the Internal Market Monitor, this makes attempting to exercise market power using these bids costly, therefore Permanent De-list Bids are likely to be competitive.¹²⁹ Accordingly, the Rule Changes allow Permanent De-List Bids to be considered in the formation of a capacity zone. Non-Price Retirement Requests, once accepted require a resource to shut down permanently. This is an even more costly consequence than a permanent de-list bid therefore, Non-Price Retirement Requests are likely to be competitive rather than an attempt to exercise market power and should be considered in the formation of a capacity zone.

In addition, although not specifically mentioned in the Internal Market Monitor's Report, Static De-List Bids, Export Bids, and Administrative Export De-List Bids from Lead Market Participants for resources that are not FCM Pivotal Suppliers are likely to be competitive (i.e. represent the resource's going forward cost) rather than an attempt to exercise market power.¹³⁰ The Internal Market Monitor agrees with this assessment and notes that since non-Pivotal Suppliers are unable to unilaterally set the zonal price, if such resources offer bids that are too high, they run the risk of having their offers to leave be accepted and lose a profitable opportunity to earn capacity revenues.¹³¹ To assure that only non-pivotal one year de-list bids affect zonal pricing and creation, the Rule Changes impose a Pivotal Supplier test for market

¹²⁸ See Internal Market Monitor Report at p.5.

¹²⁹ *Id.* at p.43.

¹³⁰ See LaPlante Testimony at pp. 5-7.

¹³¹ *Id.*

power. The pivotal supplier test acts as a safeguard against the exercise of market power by identifying which suppliers are non-pivotal and therefore likely to offer competitively. If the pivotal supplier test shows that a bid (*i.e.*, Static De-List Bids, Export Bids, and Administrative Export De-List Bids) is from a Lead Market Participant that is not an FCM Pivotal Supplier, such a bid is likely to be at competitive levels and should be included in the determination of whether to model a Capacity Zone.

Ideally, the FCA would consider all bids and offers and thereby identify the most efficient solution to meet the zonal and regional resource requirements, without regard to concerns about the exercise of market power.¹³² Existing resources with high going-forward costs that wished to de-list could leave during the auction, and cause zonal price separation as appropriate.¹³³

However, the FCA rules need to take into account the possibility of existing resources exercising market power through de-list bids and therefore restrict the ability of certain resources from affecting zonal pricing and creation. The exercise of market power is most likely to occur in concentrated, constrained zones. As stated in the June 2009 Internal Market Monitor Report:

If [all] zones were defined during rather than before an Forward Capacity Auction, all delist bids could set the price and cause price separation. This would provide large suppliers an incentive, particularly in constrained zones, to withhold capacity by submitting static and dynamic delist bids to create a zone, which would increase the price received by their other resources within the zone. This is a relatively low-risk strategy for the existing resources that wanted to delist because static and dynamic delist bids remove resources from the market for only one year.¹³⁴

Consistent with the findings in the Internal Market Monitor Report, the Filing Parties are not proposing to allow all types of bids in the Forward Capacity Market to be an input into the Capacity Zones modeling (*i.e.*, Dynamic De-List Bids,¹³⁵ Static De-List Bids from Pivotal Suppliers, Export Bids from Pivotal Suppliers, and Administrative Export De-List Bids from Pivotal Suppliers will not be considered in the modeling Capacity Zones).¹³⁶

To prevent pivotal suppliers from affecting zonal pricing and creation, the Rule Changes include the new defined term “FCM Pivotal Supplier”¹³⁷ and a test that identifies such suppliers.

¹³² *Id.* at 42.

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ A “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 below 0.8 times CONE, as described in Tariff Section III.13.2.3.2(d). These bids are not reviewed by the market monitor.

¹³⁶ *See* Internal Market Monitor Report.

¹³⁷ *See* Attachment 1, revised Tariff Section I.2 (definitions).

To determine if a market participant in the Forward Capacity Market is a Pivotal Supplier, one looks at the total Qualified Capacity from a market participant's Existing Capacity Resources in the Capacity Zone and subtracts the quantity of the market participant's capacity subject to Non-Price Retirement Requests. This net total Qualified Capacity Existing Capacity Resources in the Capacity Zone ("X") is compared to a second figure. The second figure ("Y") is the difference between: (a) the total megawatts from qualified Existing Capacity Resources in the Capacity Zone minus (b) the sum of: (i) the quantity of capacity subject to Non-Price Retirement Requests in that Capacity Zone plus, (ii) the Local Sourcing Requirement for the Capacity Zone. If the market participant's "X" (*i.e.*, its *net* total Qualified Capacity Existing Capacity Resources in the Capacity Zone) is greater than "Y" (*i.e.*, the total megawatts from all qualified Existing Capacity Resources in the Capacity zone *net of the zone's local sourcing requirement*), it is an "FCM Pivotal Supplier." The supplier is pivotal because some of its capacity is needed to meet reliability requirements.

a. Existing Tariff Provisions

Before discussing the operation of the Rule Changes under Sections III.12.4.(b)(i), (b)(ii), and (b)(iii) that set forth how Non-Price Retirement Requests, Permanent De-List Bids, Static De-List Bids from non-Pivotal Suppliers, Export Bids from non-Pivotal Suppliers, and Administrative Export De-List Bids from non-Pivotal Suppliers will be able to affect the modeling and formation of Capacity Zones during a FCA, it is helpful to discuss how such bids are used under existing tariff Section III.12.4.

Non-Price Retirement Requests. Under the existing Tariff provisions regarding import-constrained Load Zones, Non-Price Retirement Requests are not excluded from the total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period.

Permanent De-List Bids. The existing Tariff provisions provide that for each import-constrained Load Zone, a Permanent De-List Bid that cleared in a *previous* FCA is excluded from the total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period.¹³⁸ However, under the existing Tariff, capacity associated with a Permanent De-List Bid participating in the *instant* FCA, is not excluded from the total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period.

Static De-List Bids from non-Pivotal Suppliers, Export Bids from non-Pivotal Suppliers, Administrative Export De-List Bids from non-Pivotal Suppliers and Non-Price Retirement Requests. Under the current ISO tariff regarding import-constrained Load Zones, Static De-List Bids, Export Bids, and Administrative Export De-List Bids from Lead Market Participants for resources that are not FCM Pivotal Suppliers are included in the total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period.

b. Revised Tariff Sections III.12.4(b)(i), (b)(ii), and (b)(iii).

¹³⁸ See Tariff Section III.12.4(b).

The operation of revised tariff Sections III.12.4(b)(i), (b)(ii), and (b)(iii) sets forth the process in which certain bids and requests will be considered in the modeling of new Capacity Zones from the initially-modeled Load Zones in the FCA. The bids and requests that will be considered in forming new Capacity Zones are: Non-Price Retirement Requests; Permanent De-List Bids; and Static De-List Bids, Export Bids, and Administrative Export De-List Bids from Lead Market Participants for resources that are not FCM Pivotal Suppliers.

New Section III.12.4(b)(i). Section III.12.4.(b)(i) determines, for each import-constrained Load Zone, the “total amount of capacity that is projected to be installed in that Load Zone before the start of the relevant Capacity Commitment Period.” Section III.12.4.(b)(i) also provides that the “total amount of capacity that is projected to be installed in that Load Zone before the start of the relevant Capacity Commitment Period” *excludes* certain types of capacity. Revised Section III.12.4.(b)(i) contains new language that adds Non-Price Retirement Requests submitted for the instant FCA to the capacity that is excluded from total capacity that is projected to be installed in the Load Zone.

New Section III.12.4.(b)(ii). Under revised Section III.12.4.(b)(ii), the ISO *compares* the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period to that Load Zone’s forecasted Local Sourcing Requirement for the relevant Capacity Commitment Period as determined pursuant to Section III.12.2.1. If the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is less than or equal to the Local Sourcing Requirement, then the import-constrained Load Zone will be modeled as a separate Capacity Zone in the FCA.¹³⁹ On the other hand, if the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is greater than the Load Zone’s Export-Adjusted Local Sourcing Requirement (“Export-Adjusted LSR”)¹⁴⁰ then the ISO must analyze the Load Zone as described in the Rule Changes under Section III.12.4(b)(iii).

New Section III.12.4(b)(iii). Under revised Section III.12.4(b)(iii), if the Load Zone in question is not modeled as a separate Capacity Zone per Section III.12.4(b)(ii) the ISO is to perform the analyses in Section III.12.4(b)(i) and (b)(ii) *again*, except that certain additional amounts are to be excluded from the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period. The additional excluded amounts are: “the quantity of capacity that is subject to Static De-List Bids [from non-Pivotal Suppliers], Export Bids [from non-Pivotal Suppliers], and Administrative Export De-List Bids from non-Pivotal Suppliers; and Permanent De-List Bids in the instant Forward Capacity Auction.”¹⁴¹ If, with the additional capacity that is excluded, the total amount

¹³⁹ See Attachment 1, revised Tariff Section III.12.4(b)(ii).

¹⁴⁰ A Load Zone’s Export-Adjusted Local Sourcing Requirement is defined in revised Tariff Section III.12.4.(b)(ii) as: “the sum of that Load Zone’s forecasted Local Sourcing Requirement and any Export Bids or Administrative Export De-List Bids, which may be exporting capacity through the import-constrained Load Zone, limited to the transfer limit of the relevant external interface, for the relevant Capacity Commitment Period as determined pursuant to Section III.12.2.1.” See Attachment 1, revised Tariff Section III.12.4(b)(ii).

¹⁴¹ See Attachment 1, revised Tariff Section III.12.4(b)(iii).

of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is less than or equal to the Load Zone's Export-Adjusted LSR, then the import-constrained Load Zone will be modeled as a separate Capacity Zone in the FCA.¹⁴² On the other hand, if the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is greater than the Load Zone's Export-Adjusted LSR, then the Load Zone will "not be modeled as a separate Capacity Zone in the Forward Capacity Auction."¹⁴³

3. Rule Changes to Tariff Sections III.13.2.3.3(a)(1) and III.13.2.3.3(a)(2) ("The Determination of the Outcome in Each Round") Applicable to the New Methods of Capacity Zone Creation in Tariff Sections III.12.4.(b)(ii) and III.12.4.(b)(iii), as Modified by the Rule Changes.

Section III.13.2.3.3 of the Tariff determines, *inter alia*, when the FCA for a Capacity Zone is concluded *or* the amount of excess capacity from the Capacity Zone to be included in the next round of the FCA.¹⁴⁴ Given that new Capacity Zones can be created for Import-Constrained Load Zones in two different circumstances under the Rule Changes (*see* Tariff Sections III.12.4.(b)(ii) and III.12.4.(b)(iii)), there are conforming changes needed in current Tariff Sections III.13.2.3.3(a)(1) and III.13.2.3.3(a)(2).

Tariff Section III.13.2.3.3(a)(1) will apply to a Capacity Zone modeled as an import-constrained Capacity Zone pursuant to revised Section III.12.4(b)(ii). Other than the reference to Section III.12.2.4(b)(ii), Section III.13.2.3.3(a)(1) is substantively unchanged from the currently-effective Tariff provisions. If either of two conditions is met during the round,¹⁴⁵ then the FCA for that Capacity Zone is concluded and such Capacity Zone will not be included in further rounds of the FCA. If neither of the two conditions is met in the round, then the auctioneer must publish the quantity of system-wide excess supply at the End-of-Round Price, the quantity of capacity from Demand Resources by type at the End-of-Round Price, and that Capacity Zone will be included in the next round of the FCA.

New Tariff Section III.13.2.3.3(a)(2) applies to a Capacity Zone modeled as an import-constrained Capacity Zone pursuant to new Section III.12.4(b)(iii). If either of two conditions is met during the round,¹⁴⁶ then the FCA for that Capacity Zone is concluded and such Capacity

¹⁴² See Attachment 1, revised Tariff Section III.12.4.(b)(iii) (last sentence).

¹⁴³ See Attachment 1, revised Tariff Section III.12.4.(b)(iii).

¹⁴⁴ See Tariff Sections III.13.2.3.3(a) and III.13.2.3.3(c), respectively.

¹⁴⁵ The two conditions are that: (A) the aggregate supply curve for the import-constrained Capacity Zone, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), *equals or is less than* the Capacity Zone's Local Sourcing Requirement, adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions); or (B) the Total System Capacity, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), *equals or is less than* the Installed Capacity Requirement (net of HQICCs), adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions). See Attachment 1, revised Tariff Section III.13.2.3.3(a)(1) (emphases added).

¹⁴⁶ The two conditions are: (A) that (i) the aggregate supply curve for the import-constrained Capacity Zone, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), *equals or is less than* the Capacity Zone's Local Sourcing Requirement, adjusted as necessary in accordance with Section III.13.2.5.2

Zone will not be included in further rounds of the FCA. The conditions contained in Section III.13.2.3.3.(a)(1)(i) and III.13.2.3.3.(a)(2)(i) are the same except that in III.13.2.3.3.(a)(2)(i) there is a further adjustment (beyond the adjustment to account for the replacement provisions in Section III.13.2.5.2.) to the Capacity Zone's Local Sourcing Requirement if an additional condition is met. That additional condition is if the quantity of cleared bids (or those rejected for reliability reasons) from resources that are not FCM Pivotal Suppliers (including any Permanent De-List Bids cleared or rejected for reliability) is less than the difference between the total capacity projected to be installed in the zone and the Local Sourcing Requirement (adjusted to account for any export bids exporting capacity through the import constrained zone). The adjustment, if this condition is true, is to reduce the Local Sourcing Requirement by the quantity of any cleared Static De-List Bids, Export Bids and Administrative Export De-List Bids from FCM Pivotal Suppliers. Through this adjustment, the Import Constrained Zone, modeled under the new provisions contained in Section III.12.4(b)(iii), forms in the FCA only when the clearing price in the FCA is set by Static De-List Bids, Export Bids, Administrative Export De-List Bids that are not FCM Pivotal Suppliers and Permanent De-List Bids.

At the highest level, the condition for concluding the FCA for a modeled Import Constrained Zone is when the aggregate supply curve is less than or equal to the Zone's Local Sourcing Requirement. The additional condition contained in Section III.13.2.3.3.(a)(2)(i) is if the cleared de-list bids are less than the excess capacity then an adjustment is made to the Zone's Local Sourcing Requirement to include the quantity of cleared bids from FCM Pivotal Suppliers.

V. STAKEHOLDER PROCESS

The Rule Changes are the product of a very extensive stakeholder process that culminated in NEPOOL Participants Committee votes of 70.1% and 71.69% in support of the Changes. As noted, that process began over one year ago in response to efforts to improve FCM based on experiences over the first three auctions, and in response to the report issued by the ISO's Internal Market Monitor. In response to requests by state regulators, the NEPOOL process was expanded by the creation of an FCM Working Group. Also in response to request from state regulators, the region sought the assistance of Cynthia Marlette of FERC to serve as a neutral party in working through the FCM issues. The FCM Working Group produced a design basis document that received broad support from the states and Participants at the NEPOOL Participants Committee meeting in November with a vote of 69.06% in favor, but which was not supported by the ISO. The ISO also produced a design basis document, but this document received little support from the NEPOOL Participants Committee. The two design basis documents were largely the same, but differed on a few specific issues that resulted in the

(replacement provisions) and (ii), if the quantity of cleared Static De-List Bids, Export Bids, and Administrative Export De-List Bids from resources that are not FCM Pivotal Suppliers and cleared Permanent De-List Bids in the instant Forward Capacity Auction *is less than the difference between* (a) the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period and (b) the Export-Adjusted Local Sourcing Requirement, adjusted to include the quantity of cleared Static De-List Bids, Export Bids, and Administrative Export De-List Bids from FCM Pivotal Suppliers; or (B) the Total System Capacity, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), *equals or is less than* the Installed Capacity Requirement (net of HQICCs), adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions). See Attachment 1, revised Tariff Section III.13.2.3.3(a)(2)(i) and III.13.2.3.3(a)(2)(ii) (emphases added).

differing levels of support. The ISO, state representatives, and Market Participants continued to work together to develop market rule changes that addressed the identified concerns, and ultimately settled on a single set of modifications – the instant Rule Changes – that were supported by NEPOOL, state regulators, and the ISO. The Markets Committee considered and discussed the Rule Changes to Section 13 of the Market Rules over four meetings during the December 2009 - January 2010 time frame and ultimately voted to recommend Participants Committee approval with a vote of 71.69% in support. The Reliability Committee considered and discussed the Rule Changes to Section 12 on a similar timeframe as the Markets committee, and also voted to recommend Participants Committee support of those changes with a vote of 65.4% in support.

The NEPOOL Participants Committee considered the Rule Changes at its February 5, 2010 meeting and approved them in two separate votes, after voting and not approving numerous proposed amendments to the Rule Changes. Specifically, the Participants Committee approved the Rule Changes in Section 13 by 70.1% Vote, following consideration of six separate proposed amendment to those Rule Changes. The Participants Committee approved the Rule Changes in Section 12 by a 71.69% Vote, following consideration of two separate proposed amendments to those Rule Changes.

While all Participants may agree that the Rule Changes represent an improvement to the status quo, some Participants with generating capacity to serve the region sought additional changes. All of the amendments were opposed by ISO and none of them received sufficient support to be approved by NEPOOL. In the end, the Rule Changes were approved with support generally from those representing transmission, load serving entities, publicly-owned entities, alternative resources and end users, with opposition from the entire Generation Sector and further opposition or abstention in the Supplier Sector. Attachment 7 to this transmittal letter tabulates that Participants Committee vote.

VI. REQUESTED EFFECTIVE DATES

The ISO requests an effective date of April 23, 2010 for the Rule Changes, so that they may be effective for the Fourth FCA, scheduled for August 2, 2010.

VII. 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.¹⁴⁷ However, the Rule Changes are associated with the FCM and are not traditional "rates." Further, the Filing Parties are not a traditional investor-owned utilities. Therefore, to the extent necessary, the Filing Parties request waiver of Section 35.13 of the Commission's regulations. Notwithstanding their request for waiver, the Filing Parties submit the additional information enumerated below in substantial compliance with relevant provisions of Section 35.13.

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

¹⁴⁷ 18 C.F.R. § 35.13 (2009).

- ◆ This transmittal letter;
- ◆ Attachment 1: Tariff sheets reflecting in blackline the changes reflected in this filing;
- ◆ Attachment 2: Clean Tariff sheets incorporating the changes reflected in this filing;
- ◆ Attachment 3: Prepared Testimony of Robert G. Ethier, sponsored by the ISO;
- ◆ Attachment 4: Prepared Testimony of Mark G. Karl, sponsored by the ISO;
- ◆ Attachment 5: Prepared Testimony of David LaPlante, sponsored by the ISO;
- ◆ Attachment 6: Tabulation of the NEPOOL Participants Committee votes; and
- ◆ Attachment 7: 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 noted in Section VI of this transmittal letter, the Filing Parties request that the modifications of the Tariff submitted with this filing become effective on April 23, 2010.

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_ptcpts_eserved.pdf. A paper copy of this 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, and to the New England Conference of Public Utility Commissioners ("NECPUC"). The names and addresses of these governors and regulatory agencies are shown in Attachment 7. In accordance with Commission rules and practice, there is no need for the Governance Participants or the entities identified on Attachment 7 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 this transmittal letter.

35.13(b)(5) - The reasons for this filing are discussed in 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 approval and support of the Participants Committee.

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

VIII. CONCLUSION

For the foregoing reasons, the Filing Parties respectfully request that the Commission approve the changes to the Forward Capacity Market rules described herein, to become effective on April 23, 2010, without condition or change.

Respectfully submitted,

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Dated: February 22, 2010

ATTACHMENT 1

Blacklined tariff sheets containing revisions to 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.

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 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 a purchase by a Market Participant of energy external to the New England Control Area or a sale by a Market Participant of energy external to the New England Control Area in the Day-Ahead Energy Market and/or Real-Time Energy Market or a through transaction scheduled by 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, 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-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.

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 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 Pivotal Supplier shall mean a Lead Market Participant whose total Qualified Capacity from its Existing Capacity Resources in a Capacity Zone minus the quantity of its capacity subject to Non-Price Retirement Requests in that Capacity Zone for the current Forward Capacity Auction is greater than the difference between the total MW from qualified Existing Capacity Resources in the Capacity Zone minus the sum of the quantity of capacity subject to Non-Price Retirement Requests in that Capacity Zone plus the Local Sourcing Requirement for that Capacity Zone.

Filing Entity is a PTO or PTOs submitting a proposal to the FERC to participate in, join, or become an ITC in accordance with Attachment M of the OATT.

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

If the Installed Capacity Requirement shows a consistent bias over time, either high or low, the ISO shall make adjustments to the modeling assumptions and/or methodology through the stakeholder process to eliminate the bias in the Installed Capacity Requirement.

The modeling assumptions used in determining the Installed Capacity Requirement are specified in Sections III.12.7, III.12.8 and III.12.9. For the purpose of this Section III.12, a “resource” shall include generating resources, demand resources, and import capacity resources eligible to receive capacity payments in the Forward Capacity Market.

III.12.2 Local Sourcing Requirements and Maximum Capacity Limits. Prior to each Forward Capacity Auction, the ISO shall calculate the capacity requirements and limitations, accounting for relevant transmission interface limits which shall be determined pursuant to Section III.12.5, for each Load Zone for each upcoming Capability Year through the Capacity Commitment Period associated with that Forward Capacity Auction. The Local Sourcing Requirement shall represent the minimum amount of capacity that must be procured~~electrically located~~ within an import-constrained Load Zone. The Maximum Capacity Limit shall represent the maximum amount of capacity that can be procured in an export-constrained Load Zone to meet the Installed Capacity Requirement.

The ISO shall use consistent assumptions and standards to establish a resource's electrical location for purposes of qualifying a resource for the Forward Capacity Market and for purposes of calculating Local Sourcing Requirements.

Load Zones will be reconfigured as necessary pursuant to Section III.2.7(g) of Market Rules.

The methodology used in determining the Local Sourcing Requirements and the Maximum Capacity Limits are specified in Sections III.12.2.1 and III.12.2.2, respectively. The modeling assumptions used in determining the Local Sourcing Requirements and the Maximum Capacity Limits are specified in Sections III.12.5, III.12.6, III.12.7, III.12.8 and III.12.9.

III.12.2.1 Calculation of Local Sourcing Requirements for Import-Constrained Load Zones. For each import-constrained Load Zone, the Local Sourcing Requirement shall be the amount needed to satisfy the higher of: (i) the Local Resource Adequacy Requirement as determined pursuant to Section III.12.2.1.1; or (ii) the Transmission Security Analysis as determined pursuant to Section III.12.2.1.2. ~~calculated using the following method:~~

III.12.2.1.1 Local Resource Adequacy Requirement. The Local Resource Adequacy Requirement shall be calculated as follows:

- (a) Two areas shall be modeled: (i) the Load Zone under study which includes all load and all resources electrically located within the Load Zone, including external Control Area support from tie benefits on the import-constrained side of the interface, if any; and (ii) the rest of the New England Control Area which includes all load and all resources electrically located within the rest of the New England Control Area, including external Control Area support from tie benefits on the unconstrained side of the interface, if any.

- (b) The only transmission constraint to be modeled shall be the transmission interface limit between the Load Zone under study and the rest of the New England Control Area as determined pursuant to Section III.12.5.
- (c) Any proxy units that are required in the New England Control Area pursuant to Section III.12.7.1 shall be modeled as specified in Section III.12.7.1, in order to ensure that the New England Control Area meets the resource adequacy planning criterion specified in Section III.12.1. If the system LOLE ~~with proxy units added~~ is less than 0.1 days/year, firm load is added (or unforced capacity is subtracted) so that the system LOLE equals 0.1 days/year.
- (d) The Local Resource Adequacy~~Sourcing~~ Requirement for the import-constrained Load Zone Z shall be determined in accordance with the following formula:

$$\frac{\text{LRALS}_{Z}}{\text{(Proxy Units)}} = \text{Resources}_{Z} + \text{Proxy Units}_{Z} - \frac{\text{Adjustment}_{Z}}{(1 - \text{FOR}_{Z})} - \frac{\text{Firm Load Adjustment}_{Z}}{(1 - \text{FOR}_{Z})}$$

In which:

- $\frac{\text{LRALS}_{Z}}{\text{(Proxy Units)}}$ = MW of Local Resource Adequacy~~Sourcing~~ Requirement for Load Zone Z;
- Resources_{Z} = MW of resources electrically located within Load Zone Z, including Import Capacity Resources on the import-constrained side of the interface, if any;
- Proxy Units_{Z} = MW of proxy unit additions in Load Zone Z;
- Firm Load Adjustment_Z = MW of firm load added (or subtracted) within Load Zone Z to make the LOLE of the New England Control Area equal to 0.105 days per year; and
- FOR_{Z} = Capacity weighted average of the forced outage rate modeled for all resources within Load Zone Z, including any proxy unit additions to Load Zone Z.

Proxy Units
Adjustment = MW of firm load added to (or unforced capacity subtracted from) Load Zone Z until the system LOLE equals 0.1 days/year.

To determine the Local ~~Resource Adequacy~~ Sourcing Requirement, the firm load is adjusted within Load Zone Z until the LOLE of the New England Control Area reaches 0.105 days per year. The LOLE of 0.105 days per year includes an allowance for transmission related LOLE of 0.005 days per year associated with each interface. As firm load is added to (or subtracted from) Load Zone Z, an equal amount of firm load is removed from (or added to) the rest of New England Control Area.

III.12.2.1.2 Transmission Security Analysis Requirement. A

Transmission Security Analysis shall be used to determine the requirement of the Load Zone being studied, and shall include the following features:

- (a) The ISO shall perform a series of transmission load flow studies and/or a deterministic operable capacity analysis targeted at determining the performance of the system under stressed conditions, and at developing a resource requirement sufficient to allow the system to operate through those stressed conditions.
- (b) The Transmission Security Analysis requirement shall be set at a level sufficient to cover most reasonably anticipated events, but will not guarantee that every combination of obligated resources within the zone will meet system needs.

~~III.12.2.2 Calculation of Maximum Capacity Limit for Export-Constrained~~

~~Load Zones. For each export-constrained Load Zone, the Maximum Capacity Limit shall be calculated using the following method:~~

-
- (a) ~~Two areas shall be modeled: (i) the Load Zone under study which includes all load and all resources electrically located within the Load Zone, including external Control Area support from tie benefits on the export constrained side of the interface, if any; and (ii) the rest of the New England Control Area, which includes all load and all resources electrically located within the rest of the New England Control Area, including external Control Area support from tie benefits to the rest of New England Control Area, if any.~~
- (b) ~~The only transmission constraint to be modeled shall be the transmission interface limit between the Load Zone under study and the rest of the New England Control Area as determined pursuant to Section III.12.5.~~
- (c) ~~Any proxy units that are required in the New England Control Area pursuant to Section III.12.7.1 shall be modeled as specified in Section III.12.7.1, in order to ensure that the New England Control Area meets the resource adequacy planning criterion specified in Section III.12.1. If the system LOLE with proxy units added is less than 0.1 days/year, firm load is added (or unforced capacity is subtracted) so that the system LOLE equals 0.1 days/year.~~

- (c) In performing the Transmission Security Analysis, the ISO may establish static transmission interface transfer limits as a reasonable representation of the transmission system’s capability to serve load with available existing resources.
- (d) The Transmission Security Analysis may model the entire New England system and individual Load Zones, for both the first contingency (N-1) and second contingency (N-1-1) conditions. First contingency conditions (N-1) shall include the loss of the most critical generator or most critical transmission element with respect to the Load Zone. Second contingency conditions (N-1-1) shall include both: (i) the loss of the most critical generator with respect to the Load Zone followed by the loss of the most critical transmission element (“Line-Gen”); and (ii) the loss of the most critical transmission element followed by the loss of the next most critical transmission element (“Line-Line”) with respect to the Load Zone.

III.12.2.2 Calculation of Maximum Capacity Limit for Export-Constrained

Load Zones. For each export-constrained Load Zone, the Maximum Capacity Limit shall be calculated using the following method:

- (a) Two areas shall be modeled: (i) the Load Zone under study which includes all load and all resources electrically located within the Load Zone, including external Control Area support from tie benefits on the export-constrained side of the interface, if any; and (ii) the rest of the New England Control Area, which includes all load and all resources electrically located within the rest of the New England Control Area, including external Control Area support from tie benefits to the rest of the New England Control Area, if any.
- (b) The only transmission constraint to be modeled shall be the transmission interface limit between the Load Zone under study and the rest of the New England Control Area as determined pursuant to Section III.12.5.
- (c) Any proxy units that are required in the New England Control Area pursuant to Section III.12.7.1 shall be modeled as specified in Section III.12.7.1, in order to ensure that the New England Control Area meets the resource adequacy planning criterion specified in Section III.12.1. If the system LOLE ~~with proxy units added~~ is less than 0.1 days/year, firm load is added (or unforced capacity is subtracted) so that the system LOLE equals 0.1 days/year.

- (d) The Maximum Capacity Limit for the export-constrained Load Zone Y shall be determined in accordance with the following formula:

$$\text{Maximum Capacity Limit}_Y = \text{ICR} - \underline{\text{LRALSR}}_{\text{RestofNewEngland}}$$

In which:

Maximum Capacity Limit_Y = Maximum MW amount of resources, including Import Capacity Resources on the export-constrained side of the interface, if any, that can be procured in the export-constrained Load Zone Y to meet the Installed Capacity Requirement;

ICR = MW of Installed Capacity Requirement for the New England Control Area, determined in accordance with Section III.12.1; and

LRALSR_{RestofNewEngland} = MW of Local Sourcing Requirement for the rest of the New England Control Area, which for the purposes of this calculation is treated as an import-constrained region, determined in accordance with Section III.12.2.1.

III.12.3 Consultation and Filing of Capacity Requirements. At least two months prior to filing the Installed Capacity Requirements and Local Sourcing Requirements for each upcoming Capability Year through the relevant Capacity Commitment Period with the Commission, the ISO shall review the modeling assumptions and resulting Installed Capacity Requirements and the Local Sourcing Requirements with the Governance Participants, the state utility regulatory agencies in New England and, as appropriate, other state agencies.

Following consultation with Governance Participants, the state utility regulatory agencies in New England and, as appropriate, other state agencies, the ISO shall file the Installed Capacity Requirements and Local Sourcing Requirements for each upcoming Capability Year through the relevant Capacity Commitment Period with the Commission pursuant to Section 205 of the Federal Power Act 90 days prior to the Forward Capacity Auction for the Capacity Commitment Period.

III.12.4 Determination of Capacity Zones. Prior to each Forward Capacity Auction, the ISO shall determine the Capacity Zones to be modeled in that Forward Capacity Auction as specified below, and will include such designations in its filing with the Commission pursuant to Section III.13.8.1:

- (a) Each export-constrained Load Zone shall be modeled as a separate Capacity Zone in the Forward Capacity Auction.

- (b) (i) For each import-constrained Load Zone, the ISO shall determine the total amount of capacity that is projected to be installed in that Load Zone before the start of the relevant Capacity Commitment Period, by summing the summer Qualified Capacity of Existing Generating Capacity Resources, resources cleared in previous Forward Capacity Auctions, Existing Demand Resources qualified to participate in the Forward Capacity Market and Other Demand Resources in existence during the ICAP Transition Period and Import Capacity Resources cleared in previous Forward Capacity Auctions or reconfiguration auctions and obligated for the relevant Capacity Commitment Period. The total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period shall exclude capacity that for the relevant Capacity Commitment Period is subject to either a Permanent De-List Bid cleared in previous Forward Capacity Auctions or Administrative Export De-List Bid obligated for the relevant Capacity Commitment Period or Non-Price Retirement Requests submitted for the instant Forward Capacity Auction.
- (b) (ii) The ISO shall compare the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period to that Load Zone's forecasted Local Sourcing Requirement for the relevant Capacity Commitment Period as determined pursuant to Section III.12.2.1. If the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is greater than the Load Zone's Export-Adjusted LSR (which shall be the sum of that Load Zone's forecasted Local Sourcing Requirement and any (i) Export Bids or (ii) Administrative Export De-List Bids, which may be exporting capacity through the import-constrained Load Zone, limited to the transfer limit of the relevant external interface, for the relevant Capacity Commitment Period as determined pursuant to Section III.12.2.1, the Load Zone shall not be modeled as a separate Capacity Zone in the Forward Capacity Auction. Otherwise, the import-constrained Load Zone shall be modeled as a separate Capacity Zone in the Forward Capacity Auction.

~~(c) Adjacent Load Zones that are neither export constrained nor import constrained shall together be modeled as a single Capacity Zone.~~

Period as determined pursuant to Section III.12.2.1), then the ISO shall analyze the Load Zone as described in Section III.12.4(b)(iii) below. ~~the Load Zone shall not be modeled as a separate Capacity Zone in the Forward Capacity Auction.~~ Otherwise, the analysis described in Section III.12.4(b)(iii) below will not be performed and the import-constrained Load Zone shall be modeled as a separate Capacity Zone in the Forward Capacity Auction.

- (b) (iii) If the Load Zone in question is not modeled as a separate Capacity Zone as a result of the analysis described in Section III.12.4(b)(i) and Section III.12.4(b)(ii), then the ISO shall perform the analysis described in those sections again, except that the following amounts shall also be excluded from the total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period: the quantity of capacity that is subject to Static De-List Bids, Export Bids, and Administrative Export De-List Bids from Lead Market Participants for resources that are not FCM Pivotal Suppliers and Permanent De-List Bids in the instant Forward Capacity Auction. If, with that change, the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is greater than the Load Zone's Export-Adjusted LSR, then the Load Zone shall not be modeled as a separate Capacity Zone in the Forward Capacity Auction. Otherwise, the import-constrained Load Zone shall be modeled as a separate Capacity Zone in the Forward Capacity Auction.
- (c) Adjacent Load Zones that are neither export-constrained nor import-constrained shall together be modeled as the Rest-of-Pool a single Capacity Zone.
- (d) In the event a valid transfer limit cannot be determined pursuant to Section III.12.5, the Load Zone with the indeterminate limit will be consolidated into the Rest-of-Pool Capacity Zone.

- (e) In the event transmission limitations develop such that intra-zonal constraints must be modeled in the Forward Capacity Market, any necessary subdivision of a Load Zone into one or more modeled Capacity Zones will respect the Load Zone boundaries and, to the extent possible, the state retail electric service territories. In that circumstance, references in this Section III.12 to “Load Zone” shall be construed to apply to such subdivisions of a Load Zone as appropriate.
- (f) Modeled Capacity Zone shall take into account significant changes in transfer limits due to changes in system topology.

III.12.5 Transmission Interface Limits. Transmission interface limits, used in the determination of Local Sourcing Requirements, shall be determined using network models that include all resources-, existing transmission lines and proposed transmission lines that the ISO determines, in accordance with Section III.12.6, will be in service no later than the first day of the relevant Capacity Commitment Period. Load modeling assumptions used in determining the transmission interface limits are specified in Section III.12.8. The transmission interface limits shall be calculated assuming simultaneous imports from directly connected Control Areas up to the level of tie benefits that may be assumed over the applicable interface.

Prior to each Forward Capacity Auction, the ISO shall update the transmission interface limits for each internal and external interface for each upcoming Capability Year through the Capacity Commitment Period associated with that Forward Capacity Auction. This update shall take into account any additional transmission projects and elements of transmission projects that are added to the network model pursuant to Section III.12.6. The transmission interface limits shall be established, using deterministic analyses, at levels that provide acceptable thermal, voltage and stability performance of the system both with all lines in service and after any criteria contingency occurs as specified in ISO New England Manuals and ISO New England Administrative Procedures.

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- (e) Any contracts required to procure or construct a transmission project are in place consistent with the critical path schedule. The ISO's analysis may also take into account whether such contracts contain incentive and/or penalty clauses to encourage third parties to advance the delivery of material services to conform with the critical path schedule.
 - (f) Physical site work is on schedule consistent with the critical path schedule.
 - (g) The transmission project is in a designated National Interest Electric Transmission Corridor in accordance with Section 216 of the Federal Power Act, 16 U.S.C. §§ 824p.

III.12.7 Resource Modeling Assumptions.

III.12.7.1 Proxy Units. When the available resources are insufficient for the unconstrained New England Control Area to meet the resource adequacy planning criterion specified in Section III.12.1, proxy units shall be used as additional capacity to determine the Installed Capacity Requirement and the Local Resource Adequacy Sourcing Requirements. The proxy units shall reflect resource capacity and outage characteristics such that when the proxy units are used in place of all other resources in the New England Control Area, the reliability, or LOLE, of the New England Control Area does not change. The outage characteristics are the summer capacity weighted average availability of the resources in the New England Control Area as determined in accordance with Section III.12.7.3. The capacity of the proxy unit is determined by adjusting the capacity of the proxy unit until the LOLE of the New England Control Area is equal to the LOLE calculated while using the capacity assumptions described in Section III.12.7.2.

When modeling transmission constraints for the determination of Local Resource Adequacy Sourcing Requirements, the same proxy units may be added to the import-constrained Load Zone or elsewhere in the rest of the New England Control Area depending on where system constraints exist.

III.12.7.2 Capacity. The resources included in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements shall include:

- (a) all Existing Generating Capacity Resources,

For Existing Generating Capacity Resources:

- (a) The most recent five-year moving average of EFORD shall be used as the measure of resource availability used in the calculation of the Installed Capacity Requirement and the Local ~~Resource Adequacy Sourcing~~ Requirements until the ISO determines that the use of weighted EFORD, pursuant to subsection (b) is appropriate. The most recent five-year moving average of EFORD shall be used as the measure of resource availability for non-peaking resources used in the calculation of Transmission Security Analysis Requirements until the ISO determines that the use of weighted EFORD, pursuant to subsection (b) is appropriate. A deterministic adjustment factor, based on the operational experience of the ISO, shall be used as the measure of resource availability for peaking resources used in the calculation of Transmission Security Analysis Requirements, and will be reviewed periodically.
- (b) Once sufficient data are collected during the ICAP Transition Period, use of weighted EFORD as a transition metric between EFORD and the process for measuring availability in the Forward Capacity Market shall be evaluated and included in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements.
- (c) Once sufficient data are collected under the availability incentives in the Forward Capacity Market, a resource availability metric, which reflects resource availability in a manner that is consistent with the availability incentives in the Forward Capacity Market, shall be developed and reviewed with Governance Participants, the state utility regulatory agencies in New England and, as appropriate, other state agencies and used in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements.

For resources cleared in previous Forward Capacity Auctions or obligated for the relevant Capacity Commitment Period that do not have sufficient data to calculate an availability metric as defined in subsections (a), (b) or (c) above, class average data for similar resource types shall be used.

~~For Demand Resources and Other Demand Resources in existence during the ICAP Transition Period, historical performance data for those resources will be used to develop an availability metric for use~~

~~in the calculation of the Installed Capacity Requirement and Local Sourcing Requirements.~~

III.12.7.4 Load and Capacity Relief. ~~Load and capacity relief expected from system-wide implementation of the following actions during a capacity deficiency (Operating Procedure No. 4) shall be included in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements. The Installed Capacity Requirements and Local Sourcing Requirements shall reflect the impact of the following actions during a capacity deficiency which are specified in the ISO New England Manuals and ISO New England Administrative Procedures:~~

For Demand Resources and Other Demand Resources, including Real-Time Emergency Generation, in existence during the ICAP Transition Period, historical performance data for those resources will be used to develop an availability metric for use in the calculation of the Installed Capacity Requirement and Local Sourcing Requirements.

III.12.7.4 Load and Capacity Relief. Load and capacity relief expected from system-wide implementation of the following actions during a capacity deficiency (Operating Procedure No. 4) shall be included in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements. The Installed Capacity Requirements and Local Sourcing Requirements shall reflect the impact of the following actions during a capacity deficiency which are specified in the ISO New England Manuals and ISO New England Administrative Procedures:

Unit shall determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues other than capacity revenues. The Internal Market Monitoring Unit will consider reductions in costs such as reduced taxes in determining expected net revenues. Expected net revenues considered in this determination shall only include net revenues that are: (i) tradeable throughout the New England Control Area or not restricted to resources within a particular state or other geographic sub-region; and (ii) available to all resources of the same physical type within the New England Control Area, regardless of the resource owner. Expected net revenues shall include economic development incentives that are offered broadly by state or local government and that are not expressly intended to reduce prices in the Forward Capacity Market. In estimating expected net revenue from other markets, the Internal Market Monitoring Unit shall consider whether any contract revenues relied on by the New Generating Capacity Resource reasonably represent the market price for the non-capacity products or services provided. If the Internal Market Monitoring Unit determines that the offer is not consistent with the long run average costs net of expected net revenues other than capacity revenues, as described above, then the amount of capacity clearing from that offer shall be considered Out-of-Market Capacity for purposes of determining the applicability of the Alternative Capacity Price Rule, as discussed in Section III.13.2.7.8. Sufficient documentation and information must be included in the resource's qualification package to allow the Internal Market Monitoring Unit to make such a determination. Such documentation should include all relevant financial estimates and cost projections for the project, including the project's pro-forma financing support data.

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

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 ~~price of 2.0 times CONE~~. 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 ~~price of 2.0 times CONE~~. The Internal Market Monitoring Unit shall review each bid made pursuant to this Section III.13.1.2.2.5.2, and if the Internal Market Monitoring Unit 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

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 0.8 times CONE are subject to review by the Internal Market Monitoring Unit 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~~2 times CONE~~. The Existing Capacity Qualification Package for each Export Bid

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

Monitoring Unit Review of De-List

Bids. The Internal Market Monitoring Unit 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. If the Internal Market Monitoring Unit 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 Monitoring Unit 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, 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)(~~vii~~) shall include an explanation of the reasons that the de-list bid was rejected based on the Internal Market Monitoring Unit review and the resource's net risk-

adjusted going forward costs and opportunity costs as determined by the Internal Market Monitoring Unit. 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)(vii). 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 Monitoring Unit'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 Monitoring Unit restrict the ability of the resource to dynamically de-list at prices below 0.8 times CONE.

III.13.1.2.3.2.1.2. Net Risk-Adjusted Going Forward Costs. A Static De-List Bid, Export Bid above 0.8 times CONE, or Permanent De-List Bid above 1.25 times CONE shall be considered consistent with the Existing Generating Capacity Resource's net

adjustments submitted,
provided the costs are based
on known and measurable
conditions and supported by
appropriate documentation to
reflect those costs.

$CQ_{\text{Summer},kW}$ = 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:

$$RF = [(RPC \times EFORD) + (P \times \frac{\text{Forward Capacity Auction Starting Price} - \text{CONE} - \text{FCAFP}}{12, \text{months}})] \times CQ_{\text{Summer},kW}$$

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

III.13.1.2.3.2.3. Administrative Export De-List

Bids. The Internal Market Monitoring Unit 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 Monitoring Unit 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 ~~2.0 times~~ ~~€ONE~~, 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.

may not change offers below 0.75 times CONE or supporting documentation after the New Capacity Qualification Deadline.

- (b) The Internal Market Monitoring Unit shall review each offer from New Demand Resources below 0.75 times CONE. The Internal Market Monitoring Unit shall determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues for its Demand Reduction Value other than capacity revenues. The Internal Market Monitoring Unit will consider reductions in costs such as reduced taxes in determining expected net revenues. Expected net revenues considered in this determination shall only include net revenues that are: (i) tradeable throughout the New England Control Area or not restricted to resources within a particular state or other geographic sub-region; and (ii) available to all resources of the same physical type within the New England Control Area, regardless of the resource owner. Expected net revenues shall include economic development incentives that are offered broadly by state or local government and that are not expressly intended to reduce prices in the Forward Capacity Market. In estimating expected net revenues other than capacity revenues, the Internal Market Monitoring Unit shall consider whether any contract revenues relied on by the New Demand Resource reasonably represent the market price for the non-capacity products or services provided. If the Internal Market Monitoring Unit determines that the offer is not consistent with the long run average costs net of expected net revenues for its Demand

Emergency Generation Demand Resources shall submit an Updated Measurement and Verification Plan to the ISO no later than 5 business days after receipt of the Qualified Capacity notification to establish the summer and winter Qualified Capacity amounts of their resources. Such Updated Measurement and Verification Plans shall use the results of the ISO's most recent Demand Resource Operable Capacity Analysis in determining summer and winter Qualified Capacity amounts. To the extent the ISO's most recent Demand Resource Operable Capacity Analysis includes location-specific estimates of Demand Resource Critical Peak Hours, Real-Time Demand Response Event Hours, and/or Real-Time Emergency Generation Event Hours, the Updated Measurement and Verification Plans shall use the appropriate location-specific estimates of such hours in determining summer and winter Qualified Capacity amounts. Such Qualified Capacity amounts shall at least be based on the quantities of Demand Resources that cleared in the most recent Forward Capacity Auction. If the Market Participant does not submit an Updated Measurement and Verification Plan that uses the ISO's most recent Demand Resource Operable Capacity Analysis, which is at least based on the quantities of Demand Resources that cleared in the most recent Forward Capacity Auction, in determining summer and winter Qualified Capacity amounts within 5 business days after receipt of the Qualified Capacity notification, a Permanent De-list Bid shall be entered at the Forward Capacity Auction Starting Price ~~2.0 times CONE~~ for the Demand Resource.

Capacity Zone modeled as an export-constrained Capacity Zone, the lesser of the amount of capacity offered in the Capacity Zone at that price (excluding capacity offered from New Import Capacity Resources and Existing Import Capacity Resources) or the Capacity Zone's Maximum Capacity Limit) plus (for each interface between the New England Control Area and an external Control Area, the lesser of that interface's approved capacity transfer limit (net of tie benefits) or the amount of capacity offered from New Import Capacity Resources and Existing Import Capacity Resources). In computing the Total System Capacity, the total capacity associated with any Capacity Zone at any price greater than the Forward Capacity Auction Starting Price for that Capacity Zone is taken to be the total capacity at the Forward Capacity Auction Starting Price for that Capacity Zone. In no event shall the Capacity Clearing Price for a Capacity Zone be greater than the Forward Capacity Auction Starting Price for that Capacity Zone. On the basis of these aggregate supply curves, the auctioneer shall determine the outcome of the round for each modeled Capacity Zone as follows:

(a) **Import-Constrained Capacity Zones.**

(1) For a Capacity Zone modeled as an import-constrained Capacity Zone pursuant to Section III.12.4(b)(ii), if either of the following two conditions is met during the round:

- (i) the aggregate supply curve for the import-constrained Capacity Zone, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals

included in the next round of the Forward Capacity Auction.

- (2) For a Capacity Zone modeled as an import-constrained Capacity Zone pursuant to Section III.12.4(b)(iii), if either of the following two conditions is met during the round:
- (i) the aggregate supply curve for the import-constrained Capacity Zone, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals or is less than the Capacity Zone's Local Sourcing Requirement, adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions) and, if the quantity of Static De-List Bids, Export Bids, and Administrative Export De-List Bids from resources that are not FCM Pivotal Suppliers that have either cleared or been rejected for reliability reasons and Permanent De-List Bids that have either cleared or been rejected for reliability reasons in the instant Forward Capacity Auction is less than the difference between the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period and the Export-Adjusted LSR, adjusted to include the quantity of cleared Static De-List Bids, Export Bids, and Administrative Export De-List Bids from FCM Pivotal Suppliers; or
 - (ii) the Total System Capacity, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals or is less than the Installed Capacity Requirement (net of HQICCs), adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions);

~~(b) Rest-of-Pool Capacity Zone. For the Rest-of-Pool Capacity Zone, if the Total System Capacity, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals or is less than the Installed Capacity Requirement (net of HQICCs), adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions) in the round, then the Forward Capacity Auction for the Rest-of-Pool Capacity Zone is concluded, except as required to minimize the total cost for the associated Capacity Commitment Period, as described in Section III.13.2.7, and the Rest-of-Pool Capacity Zone will not be included in further rounds of the Forward Capacity Auction. The Capacity Clearing Price for the Rest-of-Pool Capacity Zone shall be set at the highest price at which the Total System Capacity is less than or equal to the Installed Capacity Requirement (net of HQICCs), subject to the other provisions of this Section III.13.2. If the Total System Capacity exceeds the Installed Capacity Requirement (net of HQICCs) at the End-of-Round Price, then the auctioneer shall publish the quantity of system-wide excess supply at the End-of-Round Price (the amount of capacity offered at the End-of-Round Price in all modeled Capacity Zones minus the Installed Capacity Requirement (net of HQICCs)) and the quantity of capacity from Demand Resources by type at the End-of-Round Price, and the Rest-of-Pool Capacity Zone will be included in the next round of the Forward Capacity Auction.~~

then the Forward Capacity Auction for that Capacity Zone is concluded, except as required to minimize the total cost for the associated Capacity Commitment Period, as described in Section III.13.2.7, and such Capacity Zone will not be included in further rounds of the Forward Capacity Auction. The Capacity Clearing Price for that Capacity Zone shall be set at the highest price at which either of the two conditions above are satisfied, subject to the other provisions of this Section III.13.2. If neither of the two conditions above are met in the round, then the auctioneer shall publish the quantity of system-wide excess supply at the End-of-Round Price (the amount of capacity offered at the End-of-Round Price in all modeled Capacity Zones minus the Installed Capacity Requirement (net of HQICCs)) and the quantity of capacity from Demand Resources by type at the End-of-Round Price, and that Capacity Zone will be included in the next round of the Forward Capacity Auction.

- (b) Rest-of-Pool Capacity Zone.** For the Rest-of-Pool Capacity Zone, if the Total System Capacity, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals or is less than the Installed Capacity Requirement (net of HQICCs), adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions) in the round, then the Forward Capacity Auction for the Rest-of-Pool Capacity Zone is concluded, except as required to minimize the total cost for the associated Capacity Commitment Period, as described in Section III.13.2.7, and the Rest-of-Pool Capacity Zone will not be included in further rounds of the Forward Capacity Auction. The Capacity Clearing Price for the Rest-of-Pool Capacity Zone shall be

set at the highest price at which the Total System Capacity is less than or equal to the Installed Capacity Requirement (net of HQICCs), subject to the other provisions of this Section III.13.2. If the Total System Capacity exceeds the Installed Capacity Requirement (net of HQICCs) at the End-of-Round Price, then the auctioneer shall publish the quantity of system-wide excess supply at the End-of-Round Price (the amount of capacity offered at the End-of-Round Price in all modeled Capacity Zones minus the Installed Capacity Requirement (net of HQICCs)) and the quantity of capacity from Demand Resources by type at the End-of-Round Price, and the Rest-of-Pool Capacity Zone will be included in the next round of the Forward Capacity Auction.

Prices as a result of constraints between modeled Capacity Zones binding in the running of the Forward Capacity Auction. Where a modeled constraint does not bind in the Forward Capacity Auction, and as a result adjacent modeled Capacity Zones clear at the same Capacity Clearing Price, those modeled Capacity Zones shall be a single Capacity Zone used for all purposes of the relevant Capacity Commitment Period, including for the purposes of reconfiguration auctions and Capacity Supply Obligation Bilaterals.

III.13.2.4. Starting Price and Determination of CONE.

(a) Each Capacity Zone modeled in a Forward Capacity Auction shall have a Forward Capacity Auction Starting Price. The Forward Capacity Auction Starting Price for a Capacity Zone in the Forward Capacity Auction for the Capacity Commitment Periods beginning on June 1, 2013, June 1, 2014, and June 1, 2015 shall equal two times the CONE applicable to that Capacity Zone. The Forward Capacity Auction Starting Price for each Capacity Zone in the Forward Capacity Auction for the Capacity Commitment Period beginning on June 1, 2016 shall be \$15/kW-month. Thereafter, the Forward Capacity Auction Starting Price will be adjusted after each Forward Capacity Auction using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs. ~~The CONE applicable to a Capacity Zone shall be determined as follows:~~

(b) In the Forward Capacity Auction for the Capacity Commitment Period beginning on June 1, 2013, the CONE applicable to each Capacity Zone shall be \$4.918/kW-month.

~~(a) Until three Successful FCAs have been conducted in the Capacity Zone (a “Successful FCA” is a Forward Capacity Auction in which the Capacity Zone has neither Inadequate Supply nor Insufficient Competition), CONE shall be determined as follows:~~

~~(i) Until the completion of the first Successful FCA: CONE = \$7.50/kW-month. (Therefore, the Forward~~

~~Capacity Auction Starting Price for the Forward
Capacity Auction for the Capacity Commitment
Period beginning June 1, 2010 shall be \$15.00/kW-
month.)~~

~~(ii) Forward Capacity Auctions following the first
Successful FCA but prior to the completion of the
second Successful FCA: CONE = \$3.75/kW-month
plus 50% of the Capacity Clearing Price in the
Capacity Zone in the first Successful FCA.~~

~~(iii) Forward Capacity Auctions following the second
Successful FCA but prior to the completion of the
third Successful FCA: CONE = \$1.88/kW-month
plus 75% of the average of the Capacity Clearing~~

~~Prices in the Capacity Zone in the first two
Successful FCAs.~~

~~(b)(c)~~ (c) After each Forward Capacity Auction ~~three Successful~~
FCAs have been conducted for a Capacity Zone, the CONE
for each Capacity Zone to be used in the next Forward
Capacity Auction ~~to be applied for that zone in a Forward~~
Capacity Auction shall be the sum of (70% of the Capacity
Zone's CONE from the previous Forward Capacity
Auction) plus (30% of the Capacity Zone's Capacity
Clearing Price from the previous Forward Capacity
Auction); provided, however, that if any of the following
conditions are met, then the Capacity Zone's CONE for the
next Forward Capacity Auction shall be the same as the
Capacity Zone's CONE used in the previous Forward
Capacity Auction, adjusted using a rolling three-year
average of the Handy-Whitman Index of Public Utility
Construction Costs:

(i) the price is set pursuant to the Capacity Clearing
Price Floor described in Section III.13.2.7.3 or
pursuant to one of the Alternative Capacity Price
Rules described in Section III.13.2.7.8;

(ii) the amount of New Capacity Required in the
Capacity Zone in the previous Forward Capacity
Auction is no greater than zero (in an import-
constrained Capacity Zone, "New Capacity
Required" shall mean the Capacity Zone's Local
Sourcing Requirement, minus the total amount of
capacity of Existing Generating Capacity
Resources, Existing Import Capacity Resources,
and Existing Demand Resources in the Capacity
Zone (that is not permanently de-listed for the
Capacity Commitment Period), minus capacity
otherwise obligated in the Capacity Zone for the
Capacity Commitment Period; in the Rest-of-Pool
Capacity Zone, "New Capacity Required" shall
mean the Installed Capacity Requirement (net of
HQICCs), minus the Local Sourcing Requirement
of each modeled

import-constrained Capacity Zone, minus, for each modeled export-constrained Capacity Zone, the lesser of the Capacity Zone's Maximum Capacity Limit or the total amount of capacity of Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources in the Capacity Zone (that is not permanently de-listed for the Capacity Commitment Period), minus the total amount of capacity of Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources in the Rest-of-Pool Capacity Zone (that is not permanently de-listed for the Capacity Commitment Period), minus capacity otherwise obligated in the Rest-of-Pool Capacity Zone for the Capacity Commitment Period);

~~(ii)~~(iii) the previous Forward Capacity Auction was not a Successful FCA in the Capacity Zone;

~~(iii)~~(iv) the Capacity Clearing Price in the Capacity Zone in the previous Forward Capacity Auction was set by a New Import Capacity Resource or Existing Import Capacity Resource; or

~~(iv)~~(v) the Capacity Clearing Price in the Capacity Zone in the previous Forward Capacity Auction was set by a resource qualifying as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.3 (incremental output) or Section III.13.1.1.1.4 (derated capacity that is restored).

~~(e)~~(d) If a Capacity Zone that experienced price separation in any previous Forward Capacity Auction is either not included in a subsequent Forward Capacity Auction or does not experience price separation in that subsequent Forward Capacity Auction, its CONE will be updated using the Capacity Clearing Price of the Capacity Zone in which it was included in that subsequent Forward Capacity Auction.

~~(d)~~(e) The CONE for each Capacity Zone that is ~~determined~~calculated pursuant to the provisions of this Section III.13.2.4 shall be used for all purposes associated with the Capacity Commitment Period associated with the Forward Capacity Auction for which the CONE was ~~determined~~calculated. References in this Section III.13 to CONE shall mean the CONE applicable to the relevant Capacity Zone or modeled Capacity Zone for the relevant Capacity Commitment Period.

III.13.2.5. Treatment of Specific Offer and Bid Types in the Forward Capacity Auction.

III.13.2.5.1. Offers from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources. A New Capacity Offer (other than one from a Conditional Qualified New Generating Capacity Resource) clears (receives a Capacity Supply Obligation for the associated Capacity Commitment Period) in the Forward Capacity Auction if the Capacity Clearing Price is greater than or equal to the price specified in the offer, except possibly as a result of the Capacity Rationing Rule described in Section III.13.2.6. Starting with the fourth auction, an offer from a Conditional Qualified New Generating Capacity Resource clears (receives a Capacity Supply Obligation for the associated Capacity Commitment

the Capacity Clearing Price in an import-constrained Capacity Zone is less than the Capacity Clearing Price in the Rest-of-Pool Capacity Zone, all resources clearing in the import-constrained Capacity Zone shall be paid based on the Capacity Clearing Price in the Rest-of-Pool Capacity Zone during the associated Capacity Commitment Period.

III.13.2.7.2. Export-Constrained Capacity Zone Capacity

Clearing Price Ceiling. The Capacity Clearing Price in an export-constrained Capacity Zone shall not be higher than the Capacity Clearing Price in the Rest-of-Pool Capacity Zone. If after the Forward Capacity Auction is conducted, the Capacity Clearing Price in an export-constrained Capacity Zone is higher than the Capacity Clearing Price in the Rest-of-Pool Capacity Zone, all resources clearing in the export-constrained Capacity Zone shall be paid based on the Capacity Clearing Price in the Rest-of-Pool Capacity Zone during the associated Capacity Commitment Period.

III.13.2.7.3. Capacity Clearing Price FloorCollar. ~~In the Forward Capacity Auctions for the Capacity Commitment Period beginning on June 1, 2013, June 1, 2014, and June 1, 2015 only~~ Until three Successful Forward Capacity Auctions have been conducted in the Rest-of-Pool Capacity Zone, but in no case for more than the first five Forward Capacity Auctions, the following additional provisions regarding the Capacity Clearing Price shall apply in all Capacity Zones (and in the application of Section III.13.2.3.3(d)(iii)):

- (a) ~~[Reserved.] If the Capacity Clearing Price is above 1.4 times CONE, Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources shall be paid 1.4 times CONE during the associated Capacity Commitment Period;~~

~~and New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources shall be paid the Capacity Clearing Price during the associated Capacity Commitment Period; and~~

- (b) The Capacity Clearing Price shall not fall below 0.6 times CONE. Where the Capacity Clearing Price reaches 0.6 times CONE, offers shall be prorated such that no more than the Installed Capacity Requirement (net of HQICCs) is procured in the Forward Capacity Auction, as follows:

(i) ~~T~~he total payment to all listed capacity resources during the associated Capacity Commitment Period shall be equal to 0.6 times CONE times the Installed Capacity Requirement (net of HQICCs) applicable in the Forward Capacity Auction.

(ii) Payments to individual listed resources shall be prorated based on the total number of MWs of capacity clearing in the Forward Capacity Auction (receiving a Capacity Supply Obligation for the associated Capacity Commitment Period).

(iii) Suppliers may instead prorate their bid MWs of participation in the Forward Capacity Market by partially de-listing one or more resources. Regardless of any such proration, the full amount of capacity that cleared in the Forward Capacity Auction will be ineligible for treatment as new capacity in subsequent Forward Capacity Auctions (except as provided under Section III.13.1.1.1.2).

(iv) Any proration shall be subject to reliability review. Where proration is rejected for reliability reasons, the resource's payment shall not be prorated as described in subsection (ii) above, and the difference between its actual payment based on the Capacity Clearing Price and what its payment would have been had proration not been rejected for reliability reasons shall be allocated to Network Load

within the affected Reliability Region. In this case, the total payment described in subsection (i) above will increase accordingly. Any election to prorate bid MWs associated with a New Capacity Offer that clears in the Forward Capacity Auction shall also apply 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 Section III.13.1.1.2.2.4 or Section III.13.1.4.2.2.5.

- (v) Any election to prorate bid MWs associated with a New Capacity Offer that clears in the Forward Capacity Auction shall also apply 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 Section III.13.1.1.2.2.4 or Section III.13.1.4.2.2.5.
- (c) Where the Capacity Clearing Price reaches 0.6 times CONE, if the amount of capacity offered from New Import Capacity Resources and Existing Import Capacity Resources over an interface between an external Control Area and the New England Control Area is greater than that interface's approved capacity transfer limit (net of tie benefits, or net of HQICC in the case of the HQ Interconnection):
- (i) the full amount of capacity offered at that price from Existing Import Capacity Resources associated with contracts listed in Section III.13.1.3.3(c) shall clear; and
 - (ii) the capacity offered at that price from New Import Capacity Resources and Existing Import Capacity Resources other than Existing Import Capacity Resources associated with the contracts listed in Section III.13.1.3.3(c) will be prorated such that the interface's approved capacity transfer limit (net of tie benefits, or net of HQICC in the case of the HQ Interconnection) is not exceeded.
 - (iii) Capacity remaining after the treatment described in Sections III.13.2.7.3(c)(i) and III.13.2.7.3(c)(ii) shall be subject to the proration described in Section III.13.2.7.3(b).

III.13.2.7.4. Effect of Capacity Rationing Rule on Capacity

Clearing Price. Where the requirement that offers and bids clear or not clear in whole (Section III.13.2.6) prohibits the descending clock auction in its normal progression from clearing a Capacity Zone at the precise amount of capacity required, then the auctioneer shall analyze the aggregate supply curve to determine whether to clear more excess capacity at a lower Capacity Clearing Price or to clear less or no excess capacity at a higher Capacity Clearing Price, and shall choose the alternative that results in procuring at least the amount of capacity required while seeking to minimize the total cost for the associated Capacity Commitment Period by enumerating as many combinations of non-rationable offers and bids as practicable. De-list bids that would not be replaced in full upon clearing (Permanent De-List Bids when the Capacity Clearing Price is above 1.25 times CONE, Static De-List Bids, and Export Bids) will not clear if they are below the Capacity Clearing Price. In an import-constrained Capacity Zone, the cost minimization will not consider blocks of capacity not needed to meet the import-constrained Capacity Zone's Local Sourcing Requirement when price separation occurs between the import-constrained Capacity Zone and the Rest-of-Pool Capacity Zone. The cost minimization may result in offers below the Capacity Clearing Price not clearing, and in certain de-list bids (Permanent De-List Bids when the Capacity Clearing Price is equal to or below 1.25 times CONE and Dynamic De-List Bids) below the Capacity Clearing Price clearing. ~~For an import-constrained Capacity Zone, any capacity above the Local Sourcing Requirement that is procured as a result of the Capacity Rationing Rule shall be subject to the Capacity Carry Forward Rule described in Section III.13.2.7.9.~~

III.13.2.7.5. Effect of Decremental Repowerings on the

Capacity Clearing Price. Where the effect of accounting for certain repowering offers and bids (as described in Section III.13.2.3.2(e)) results in the auction not clearing at the lowest price for the required quantity of capacity, then the auctioneer will conduct additional auction rounds of the Forward Capacity Auction as necessary to minimize total capacity costs.

-
- (d) The offer associated with the Project Sponsor having the lower market share in the capacity auction (including Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources) shall be cleared.

III.13.2.7.8. Alternative Capacity Price Rules. In no case will the application of any of the three alternative price mechanisms described in this Section III.13.2.7.8 result in lowering the Capacity Clearing Price that otherwise results from the Forward Capacity Auction.

III.13.2.7.8.1. First Alternative Price Rule (“APR-1”)
~~Import-Constrained Capacity Zone.~~

III.13.2.7.8.1.1. Trigger. APR-1 shall be triggered in an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone ~~if~~ ~~in an import-constrained Capacity Zone~~ all of the following conditions are met:

- (a) the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction in the Capacity Zone for the associated Capacity Commitment Period is greater than zero;
- (b) ~~there is not~~ ~~the Capacity Zone does not~~ ~~have~~ Inadequate Supply in the Forward Capacity Auction (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone); and
- (c) at the Capacity Clearing Price, the amount of Out-of-Market Capacity in the Capacity Zone exceeds the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction in ~~for~~ the Capacity Zone, where the amount of Out-of-Market Capacity shall be the sum of the following amounts:

~~(i) ISO RFPs.~~ The quantity of any capacity procured in the Capacity Zone through an RFP issued by the ISO for the Capacity Commitment Period associated with the current Forward Capacity Auction.

~~(ii) Certain New Capacity Offers and New Import Capacity Offers.~~ The quantity of capacity cleared from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources for the Capacity Zone below 0.75 times CONE that were found by the Internal Market Monitoring Unit to

- (i) **ISO RFPs.** The quantity of any capacity procured in the Capacity Zone through an RFP issued by the ISO for the Capacity Commitment Period associated with the current Forward Capacity Auction.
- (ii) **Certain New Capacity Offers and New Import Capacity Offers.** The quantity of capacity cleared from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources for the Capacity Zone below 0.75 times CONE that were found by the Internal Market Monitoring Unit to be ineligible to set the Capacity Clearing Price pursuant to Sections III.13.1.1.2.6, III.13.1.3.5.6.2, and III.13.1.4.2.4.
- (iii) **Permanent De-List Bids and Non-Price Retirement Requests rejected for Reliability Reasons.** The MW quantity of Permanent De-List Bids and Non-Price Retirement Requests Rejected for reliability reasons in the Capacity Zone in the Forward Capacity Auction. ~~Carried Forward Capacity.~~ If the import-constrained Capacity Zone was also import-constrained in the previous Forward Capacity Auction, the amount of capacity above the Local Sourcing Requirement procured as a result of the Capacity Rationing Rule.
- (iv) **New Self-Supplied FCA Resources.** The quantity of capacity from New Generating Capacity Resources and New Import Capacity Resources designated as Self-Supplied FCA Resources in the Capacity Zone.

~~then the Capacity Clearing Price for that import-constrained Capacity Zone shall be the lesser of:~~
(1) \$0.01 below the price at which the last

~~remaining New Generating Capacity Resource,
New Import Capacity Resource, or New
Demand Resource in the import constrained
Capacity Zone (not including those addressed in
Section III.13.2.7.8.1(e)(ii)) withdrew from the
Forward Capacity Auction; or (2) CONE;~~

Issued by: ~~Raymond W. Hepper~~Kathleen A. Carrigan,
Senior Vice President and General Counsel
Issued on: ~~February 22, 2010~~February 15, 2007

Effective: ~~April 23, 2010~~April 16, 2007

III.13.2.7.8.1.2. Pricing. If APR-1 is triggered,

then the Capacity Clearing Price for that ~~import-constrained~~ Capacity Zone shall be the lesser of: (1) \$0.01 below the price at which the last remaining New Generating Capacity Resource, New Import Capacity Resource, or New Demand Resource in the ~~import-constrained~~ Capacity Zone (not including those addressed in Section III.13.2.7.8.1(c)(ii)) withdrew from the Forward Capacity Auction; or (2) CONE;

provided, however, that if in the Capacity Zone there is Insufficient Competition (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide in the case of the Rest-of-Pool Capacity Zone) and all capacity offered from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources at the Forward Capacity Auction Starting Prices is still included in the aggregate supply curve, then the Capacity Clearing Price shall equal CONE.

III.13.2.7.8.2. Second Alternative Price Rule (“APR-2”)

~~Rest-of-Pool Capacity Zone.~~ If there is not system-wide Inadequate Supply and in the Rest-of-Pool Capacity Zone, all of the following conditions are met:

III.13.2.7.8.2.1. Trigger. APR-2 shall be triggered

in an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone if all of the following conditions are met:

- (a) the sum of the amount of New Capacity Required plus the amount of Permanent De-List bids clearing in the Forward Capacity Auction in the Rest-of-Pool Capacity Zone for the associated Capacity Commitment

Period is less than or equal to~~greater than~~ zero; and

(b) ~~at the Capacity Clearing Price, the amount of Out-of-Market Capacity in the Rest-of-Pool Capacity Zone exceeds the amount of New Capacity Required in the Rest-of-Pool Capacity Zone, where the amount of Out-of-Market Capacity shall be the sum of the following amounts:~~

- (b) there is not Inadequate Supply in the Forward Capacity Auction (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone); and
- (c) at the Capacity Clearing Price, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction plus the amount of Carried Forward Excess Capacity in the Capacity Zone is greater than zero amount of Out-of-Market Capacity in the Rest-of-Pool Capacity Zone exceeds the amount of New Capacity Required in the Rest-of-Pool Capacity Zone, where the amount of Carried Forward Excess Capacity Out-of-Market Capacity shall be the sum of the following two amounts:
- (i) **Carried Forward Excess Out-of-Market Capacity.** The Carried Forward Excess Out-of-Market Capacity shall be calculated as follows, but in no case will it be less than zero. The Carried Forward Excess Out-of-Market Capacity for the first three Forward Capacity Auctions shall be zero. In the calculation of Carried Forward Excess Out-of-Market Capacity, past excess Out-of-Market Capacity shall not carry forward for more than six years (hence it will apply in no more than seven Forward Capacity Auctions). **ISO RFPs.** The quantity of any capacity procured in the Rest-of-Pool Capacity Zone through an RFP issued by the ISO for the

~~Capacity Commitment Period
associated with the current Forward
Capacity Auction.~~

~~(ii) **Certain New Capacity Offers.** The
quantity of capacity cleared from
New Generating Capacity Resources,
New Import Capacity Resources, and
New Demand Resources for the
Rest-of-Pool Capacity Zone below
0.75 times CONE that were found by
the Internal Market Monitoring Unit
to be ineligible to set the Capacity
Clearing Price pursuant to Sections
III.13.1.1.2.6, III.13.1.3.5.6.2 and
III.13.1.4.2.4.~~

~~(iii) **New Self-Supplied FCA Resources.**
The quantity of capacity from New
Generating Capacity Resources and
New Import Capacity Resources
designated as Self-Supplied FCA
Resources.~~

~~then the Capacity Clearing Price for the Rest-
of-Pool Capacity Zone shall be the lesser of:
(1) \$0.01 below the price at which~~

- (a) If in the previous Forward Capacity Auction, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in that Forward Capacity Auction is greater than zero, then the Carried Forward Excess Out-of-Market Capacity shall be the difference between the amount of Out-of-Market Capacity in the previous Forward Capacity Auction and the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in that previous Forward Capacity Auction.
- (b) If in the previous Forward Capacity Auction, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in that Forward Capacity Auction is less than or equal to zero, then the Carried Forward Excess Out-of-Market Capacity shall be the sum of the amount of Out-of-Market Capacity in the previous Forward Capacity Auction plus the lesser of: (i) the Carried Forward Excess Out-of-Market Capacity from the previous Forward Capacity Auction; or (ii) the absolute value of the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the previous Forward Capacity Auction.

(ii) **Capacity Carried Forward Due to Rationing.** If the Capacity Zone is import-constrained and was also import-constrained in the previous Forward Capacity Auction, the amount of capacity above the Local Sourcing Requirement procured in that Capacity Zone in the previous Forward Capacity Auction as a result of the Capacity Rationing Rule.

III.13.2.7.8.2.2. Pricing. If APR-2 is triggered, then the Capacity Clearing Price for the ~~Rest of~~ ~~Pool~~-Capacity Zone shall be the lesser of: (1) \$0.01 below the price at which

the last remaining New Generating Capacity Resource, New Import Capacity Resource, or New Demand Resource in the ~~Rest of Pool~~ Capacity Zone (not including those addressed in Section III.13.2.7.8.2(c)(ii)) withdrew from the Forward Capacity Auction; or (2) CONE; provided, however, that if in the ~~Rest of Pool~~ Capacity Zone there is Insufficient Competition (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone) and no capacity offered from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources has been withdrawn from the Forward Capacity Auction, then the Capacity Clearing Price shall equal CONE.

III.13.2.7.8.3. Third Alternative Price Rule (“APR-3”)

III.13.2.7.8.3.1. Trigger. For all Forward Capacity Auctions not subject to a floor price (as described in Section III.13.2.7.3), APR-3 shall be triggered in an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone if all of the following conditions are met:

- (a) the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction in the Capacity Zone is less than or equal to zero;
- (b) there is not Inadequate Supply in the Forward Capacity Auction (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone);

~~III.13.2.7.9. **Capacity Carry Forward Rule.** In an import-constrained Capacity Zone, any new capacity above the Local Sourcing Requirement that is procured as a result of the Capacity Rationing Rule shall be treated as Out-of-Market Capacity for purposes of determining whether the Alternative Capacity Price Rule shall apply in the import-constrained Capacity Zone in the following Forward Capacity Auction, as described in Section III.13.2.7.8. If the Alternative Capacity Price Rule does not apply in the import-constrained Capacity Zone having carried forward capacity because the amount of New Capacity Required in the Capacity Zone for the associated Capacity Commitment Period is zero, then the Capacity Clearing Price in that Capacity Zone shall not be higher than the Capacity Clearing Price in the same Capacity Zone in the previous~~

- (c) at the Capacity Clearing Price, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction plus the amount of Carried Forward Excess Capacity in the Capacity Zone is less than or equal to zero, where the amount of Carried Forward Excess Capacity shall be calculated as described in Section III.13.2.7.8.2.1(c); and
- (d) one or more Non-Price Retirement Request, Permanent De-List Bid, Static De-List Bid, Export Bid, Administrative Export De-List Bid, or Dynamic De-List Bid was rejected in the instant Forward Capacity Auction for reliability reasons pursuant to Section III.13.2.5.2.5.

III.13.2.7.8.3.2. Pricing. If APR-3 is triggered, and if the price in the Forward Capacity Auction is at or below 0.6 times CONE, then the Capacity Clearing Price in that Capacity Zone will be determined by the intersection of the aggregate supply curve as described in Section III.13.2.3.3 and a demand curve where each price / quantity pair results in the same total costs as the price described in subsection (a) below multiplied by the quantity demanded at that price.

- (a) The price at which the excess capacity remaining in the Forward Capacity Auction in that Capacity Zone is less than or equal to the total quantity of capacity associated with all Non-Price Retirement Requests, Permanent De-List Bids, Static De-List Bids, Export Bids, Administrative Export De-List Bids, or Dynamic De-List Bids rejected for reliability reasons pursuant to Section III.13.2.5.2.5.

III.13.2.7.9. [Reserved.]

~~Forward Capacity Auction. The Capacity Carry Forward Rule shall apply even if the Forward Capacity Auction has Inadequate Supply or Insufficient Competition in the import-constrained Capacity Zone or in the Rest-of-Pool Capacity Zone, so long as the Forward Capacity Auction associated with the original purchase did not have Inadequate Supply or Insufficient Competition in the import-constrained Capacity Zone or in the Rest-of-Pool Capacity Zone, as relevant.~~

III.13.2.8. Inadequate Supply and Insufficient Competition. In the case of either Inadequate Supply or Insufficient Competition, as defined in this Section III.13.2.8, the Forward Capacity Auction shall still be used to the extent possible; that is, the remedy for Inadequate Supply or Insufficient Competition shall be limited to the Capacity Zones having Inadequate Supply or Insufficient Competition.

III.13.2.8.1. Inadequate Supply.

III.13.2.8.1.1. Inadequate Supply in an Import-Constrained Capacity Zone. An import-constrained Capacity Zone will be considered to have Inadequate Supply if at the Forward Capacity Auction Starting Price the amount of capacity offered in the import-constrained Capacity Zone through New Capacity Offers is less than the amount of New Capacity Required in that Capacity Zone.

- (a) Where an import-constrained Capacity Zone has Inadequate Supply, Existing Generating Capacity Resources, Existing Import Capacity

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. Demand Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Market.

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 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 for failure to provide energy from that capacity. 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.~~

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.13.7. Performance, Payments and Charges in the Forward Capacity

Market. 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 ownership of a resource that has a Capacity Supply Obligation, the Capacity Supply Obligation shall remain associated with the resource and the new resource owner shall be bound by all provisions of this Section III.13 arising from such Capacity Supply Obligation. The owner of 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.

- for each modeled export-constrained Capacity Zone;
- (v) the multipliers applied in determining the Capacity Value of a Demand Resource, as described in Section III.13.7.1.5.1;
 - (vi) which resources are accepted and rejected in the qualification process to participate in the Forward Capacity Auction; ~~and~~
 - (vii) the Internal Market Monitoring Unit's determinations regarding each offer below 0.75 times CONE, including information regarding each of the elements considered in the Internal Market Monitoring Unit's determination of expected net revenues (other than revenues from ISO-administered markets) and whether that element was included or excluded in the determination of whether the offer is consistent with the resource's long run average costs net of expected net revenues other than capacity revenues; and
 - ~~(vii)~~(viii) the Internal Market Monitoring Unit's determinations regarding offers or bids submitted during the qualification process made according to the provisions of this Section III.13, including an explanation of the reasons for rejecting any de-list bids based on the Internal Market Monitoring Unit review and the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitoring Unit. The filing shall identify to the extent possible the components of the bid which were accepted as justified, and shall also identify to the extent possible the components of the bid which were not justified and which resulted in rejection of the bid.
- (b) Any comments or challenges to the determinations contained in the informational filing described in Section III.13.8.1(a), and any election made pursuant to Section III.13.1.2.3.2.1.1, must be filed with the Commission no later than 15 days after the ISO's submission of the informational filing. No later than 15 days after the ISO's submission of the informational ~~filing described in Section III.13.8.1(a), the Lead Market Participant must also notify the ISO of any election made pursuant to Section III.13.1.2.3.2.1.1. If the Commission does~~

~~not issue an order within 75 days after the ISO's submission
of the informational filing that directs otherwise, the~~

Issued by: Raymond W. Hepper~~Kathleen A. Carrigan,~~
~~Senior Vice President and General Counsel~~
Issued on: February 22, 2010~~August 31, 2007~~

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Regulatory Commission, Docket No. ER07-546-000,
issued April 16, 2007, 119 FERC ¶ 61,045 (2007)~~

filing described in Section III.13.8.1(a), the Lead Market Participant must also notify the ISO of any election made pursuant to Section III.13.1.2.3.2.1.1. If the Commission does not issue an order within 75 days after the ISO's submission of the informational filing that directs otherwise, the determinations contained in the informational filing and elections made pursuant to Section III.13.1.2.3.2.1.1 shall be used in conducting the Forward Capacity Auction, and challenges to Capacity Clearing Prices resulting from the Forward Capacity Auction shall be reviewed in accordance with the provisions of Section III.13.8.2(c). If within 75 days after the ISO's submission of the informational filing, the Commission does issue an order modifying one or more of the ISO's determinations, then the Forward Capacity Auction shall be conducted no earlier than 15 days following that order using the determinations as modified by the Commission (unless the Commission directs otherwise), and challenges to Capacity Clearing Prices resulting from the Forward Capacity Auction shall be reviewed in accordance with the provisions of Section III.13.8.2(c).

III.13.8.2. Filing of Forward Capacity Auction Results and Challenges Thereto.

- (a) As soon as practicable after the Forward Capacity Auction is complete, the ISO shall file the results of that Forward Capacity Auction with the Commission pursuant to Section 205 of the Federal Power Act, including the final set of Capacity Zones resulting from the auction, the Capacity Clearing Price in each of those Capacity Zones (and the Capacity Clearing Price associated with certain imports pursuant to Section III.13.2.3.3(d), if applicable), and a list of which resources received Capacity Supply Obligations in each Capacity Zone and the amount of those Capacity Supply Obligations. Upon completion of the fourth and future auctions, such list of resources that receive Capacity Supply Obligation shall also specify which resources cleared as Conditional Qualified New Generating Capacity Resources. Upon completion of the fourth and future auctions, the filing shall also list each Long Lead Time Generating Facility, as defined in Schedule 22 of Section II

ATTACHMENT 2

Clean tariff sheets containing revisions to 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.

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 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 a purchase by a Market Participant of energy external to the New England Control Area or a sale by a Market Participant of energy external to the New England Control Area in the Day-Ahead Energy Market and/or Real-Time Energy Market or a through transaction scheduled by 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, 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-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.

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 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 Pivotal Supplier shall mean a Lead Market Participant whose total Qualified Capacity from its Existing Capacity Resources in a Capacity Zone minus the quantity of its capacity subject to Non-Price Retirement Requests in that Capacity Zone for the current Forward Capacity Auction is greater than the difference between the total MW from qualified Existing Capacity Resources in the Capacity Zone minus the sum of the quantity of capacity subject to Non-Price Retirement Requests in that Capacity Zone plus the Local Sourcing Requirement for that Capacity Zone.

Filing Entity is a PTO or PTOs submitting a proposal to the FERC to participate in, join, or become an ITC in accordance with Attachment M of the OATT.

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

If the Installed Capacity Requirement shows a consistent bias over time, either high or low, the ISO shall make adjustments to the modeling assumptions and/or methodology through the stakeholder process to eliminate the bias in the Installed Capacity Requirement.

The modeling assumptions used in determining the Installed Capacity Requirement are specified in Sections III.12.7, III.12.8 and III.12.9. For the purpose of this Section III.12, a “resource” shall include generating resources, demand resources, and import capacity resources eligible to receive capacity payments in the Forward Capacity Market.

III.12.2 Local Sourcing Requirements and Maximum Capacity Limits. Prior to each Forward Capacity Auction, the ISO shall calculate the capacity requirements and limitations, accounting for relevant transmission interface limits which shall be determined pursuant to Section III.12.5, for each Load Zone for each upcoming Capability Year through the Capacity Commitment Period associated with that Forward Capacity Auction. The Local Sourcing Requirement shall represent the minimum amount of capacity that must be procured within an import-constrained Load Zone. The Maximum Capacity Limit shall represent the maximum amount of capacity that can be procured in an export-constrained Load Zone to meet the Installed Capacity Requirement.

The ISO shall use consistent assumptions and standards to establish a resource's electrical location for purposes of qualifying a resource for the Forward Capacity Market and for purposes of calculating Local Sourcing Requirements.

Load Zones will be reconfigured as necessary pursuant to Section III.2.7(g) of Market Rules.

The methodology used in determining the Local Sourcing Requirements and the Maximum Capacity Limits are specified in Sections III.12.2.1 and III.12.2.2, respectively. The modeling assumptions used in determining the Local Sourcing Requirements and the Maximum Capacity Limits are specified in Sections III.12.5, III.12.6, III.12.7, III.12.8 and III.12.9.

III.12.2.1 Calculation of Local Sourcing Requirements for Import-Constrained Load Zones. For each import-constrained Load Zone, the Local Sourcing Requirement shall be the amount needed to satisfy the higher of: (i) the Local Resource Adequacy Requirement as determined pursuant to Section III.12.2.1.1; or (ii) the Transmission Security Analysis as determined pursuant to Section III.12.2.1.2.

III.12.2.1.1 Local Resource Adequacy Requirement. The Local Resource Adequacy Requirement shall be calculated as follows:

- (a) Two areas shall be modeled: (i) the Load Zone under study which includes all load and all resources electrically located within the Load Zone, including external Control Area support from tie benefits on the import-constrained side of the interface, if any; and (ii) the rest of the New England Control Area which includes all load and all resources electrically located within the rest of the New England Control Area, including external Control Area support from tie benefits on the unconstrained side of the interface, if any.

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- (b) The only transmission constraint to be modeled shall be the transmission interface limit between the Load Zone under study and the rest of the New England Control Area as determined pursuant to Section III.12.5.
- (c) Any proxy units that are required in the New England Control Area pursuant to Section III.12.7.1 shall be modeled as specified in Section III.12.7.1, in order to ensure that the New England Control Area meets the resource adequacy planning criterion specified in Section III.12.1. If the system LOLE is less than 0.1 days/year, firm load is added (or unforced capacity is subtracted) so that the system LOLE equals 0.1 days/year.
- (d) The Local Resource Adequacy Requirement for the import-constrained Load Zone Z shall be determined in accordance with the following formula:

$$LRA_Z = Resources_Z + Proxy Units_Z - (Proxy Units Adjustment_Z / (1 - FOR_Z)) - (Firm Load Adjustment_Z / (1 - FOR_Z))$$

In which:

- LRA_Z = MW of Local Resource Adequacy Requirement for Load Zone Z;
- $Resources_Z$ = MW of resources electrically located within Load Zone Z, including Import Capacity Resources on the import-constrained side of the interface, if any;
- $Proxy Units_Z$ = MW of proxy unit additions in Load Zone Z;
- $Firm Load Adjustment_Z$ = MW of firm load added (or subtracted) within Load Zone Z to make the LOLE of the New England Control Area equal to 0.105 days per year; and
- FOR_Z = Capacity weighted average of the forced outage rate modeled for all resources within Load Zone Z, including any proxy unit additions to Load Zone Z.

Proxy Units
Adjustment = MW of firm load added to (or unforced capacity subtracted from) Load Zone Z until the system LOLE equals 0.1 days/year.

To determine the Local Resource Adequacy Requirement, the firm load is adjusted within Load Zone Z until the LOLE of the New England Control Area reaches 0.105 days per year. The LOLE of 0.105 days per year includes an allowance for transmission related LOLE of 0.005 days per year associated with each interface. As firm load is added to (or subtracted from) Load Zone Z, an equal amount of firm load is removed from (or added to) the rest of New England Control Area.

III.12.2.1.2 Transmission Security Analysis Requirement. A

Transmission Security Analysis shall be used to determine the requirement of the Load Zone being studied, and shall include the following features:

- (a) The ISO shall perform a series of transmission load flow studies and/or a deterministic operable capacity analysis targeted at determining the performance of the system under stressed conditions, and at developing a resource requirement sufficient to allow the system to operate through those stressed conditions.
- (b) The Transmission Security Analysis requirement shall be set at a level sufficient to cover most reasonably anticipated events, but will not guarantee that every combination of obligated resources within the zone will meet system needs.

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- (c) In performing the Transmission Security Analysis, the ISO may establish static transmission interface transfer limits as a reasonable representation of the transmission system's capability to serve load with available existing resources.
 - (d) The Transmission Security Analysis may model the entire New England system and individual Load Zones, for both the first contingency (N-1) and second contingency (N-1-1) conditions. First contingency conditions (N-1) shall include the loss of the most critical generator or most critical transmission element with respect to the Load Zone. Second contingency conditions (N-1-1) shall include both:
 - (i) the loss of the most critical generator with respect to the Load Zone followed by the loss of the most critical transmission element ("Line-Gen"); and
 - (ii) the loss of the most critical transmission element followed by the loss of the next most critical transmission element ("Line-Line") with respect to the Load Zone.

III.12.2.2 Calculation of Maximum Capacity Limit for Export-Constrained

Load Zones. For each export-constrained Load Zone, the Maximum Capacity Limit shall be calculated using the following method:

- (a) Two areas shall be modeled: (i) the Load Zone under study which includes all load and all resources electrically located within the Load Zone, including external Control Area support from tie benefits on the export-constrained side of the interface, if any; and (ii) the rest of the New England Control Area, which includes all load and all resources electrically located within the rest of the New England Control Area, including external Control Area support from tie benefits to the rest of the New England Control Area, if any.
- (b) The only transmission constraint to be modeled shall be the transmission interface limit between the Load Zone under study and the rest of the New England Control Area as determined pursuant to Section III.12.5.
- (c) Any proxy units that are required in the New England Control Area pursuant to Section III.12.7.1 shall be modeled as specified in Section III.12.7.1, in order to ensure that the New England Control Area meets the resource adequacy planning criterion specified in Section III.12.1. If the system LOLE is less than 0.1 days/year, firm load is added (or unforced capacity is subtracted) so that the system LOLE equals 0.1 days/year.

- (d) The Maximum Capacity Limit for the export-constrained Load Zone Y shall be determined in accordance with the following formula:

$$\text{Maximum Capacity Limit}_Y = \text{ICR} - \text{LRA}_{\text{RestofNewEngland}}$$

In which:

Maximum Capacity Limit_Y = Maximum MW amount of resources, including Import Capacity Resources on the export-constrained side of the interface, if any, that can be procured in the export-constrained Load Zone Y to meet the Installed Capacity Requirement;

ICR = MW of Installed Capacity Requirement for the New England Control Area, determined in accordance with Section III.12.1; and

LRA_{RestofNewEngland} = MW of Local Sourcing Requirement for the rest of the New England Control Area, which for the purposes of this calculation is treated as an import-constrained region, determined in accordance with Section III.12.2.1.

III.12.3 Consultation and Filing of Capacity Requirements. At least two months prior to filing the Installed Capacity Requirements and Local Sourcing Requirements for each upcoming Capability Year through the relevant Capacity Commitment Period with the Commission, the ISO shall review the modeling assumptions and resulting Installed Capacity Requirements and the Local Sourcing Requirements with the Governance Participants, the state utility regulatory agencies in New England and, as appropriate, other state agencies.

Following consultation with Governance Participants, the state utility regulatory agencies in New England and, as appropriate, other state agencies, the ISO shall file the Installed Capacity Requirements and Local Sourcing Requirements for each upcoming Capability Year through the relevant Capacity Commitment Period with the Commission pursuant to Section 205 of the Federal Power Act 90 days prior to the Forward Capacity Auction for the Capacity Commitment Period.

III.12.4 Determination of Capacity Zones. Prior to each Forward Capacity Auction, the ISO shall determine the Capacity Zones to be modeled in that Forward Capacity Auction as specified below, and will include such designations in its filing with the Commission pursuant to Section III.13.8.1:

- (a) Each export-constrained Load Zone shall be modeled as a separate Capacity Zone in the Forward Capacity Auction.

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- (b) (i) For each import-constrained Load Zone, the ISO shall determine the total amount of capacity that is projected to be installed in that Load Zone before the start of the relevant Capacity Commitment Period, by summing the summer Qualified Capacity of Existing Generating Capacity Resources, resources cleared in previous Forward Capacity Auctions, Existing Demand Resources qualified to participate in the Forward Capacity Market and Other Demand Resources in existence during the ICAP Transition Period and Import Capacity Resources cleared in previous Forward Capacity Auctions or reconfiguration auctions and obligated for the relevant Capacity Commitment Period. The total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period shall exclude capacity that for the relevant Capacity Commitment Period is subject to either a Permanent De-List Bid cleared in previous Forward Capacity Auctions or Administrative Export De-List Bid obligated for the relevant Capacity Commitment Period or Non-Price Retirement Requests submitted for the instant Forward Capacity Auction.
- (b) (ii) The ISO shall compare the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period to that Load Zone's forecasted Local Sourcing Requirement for the relevant Capacity Commitment Period as determined pursuant to Section III.12.2.1. If the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is greater than the Load Zone's Export-Adjusted LSR (which shall be the sum of that Load Zone's forecasted Local Sourcing Requirement and any Export Bids or Administrative Export De-List Bids, which may be exporting capacity through the import-constrained Load Zone, limited to the transfer limit of the relevant external interface, for the relevant Capacity Commitment

Period as determined pursuant to Section III.12.2.1), then the ISO shall analyze the Load Zone as described in Section III.12.4(b)(iii) below. Otherwise, the analysis described in Section III.12.4(b)(iii) below will not be performed and the import-constrained Load Zone shall be modeled as a separate Capacity Zone in the Forward Capacity Auction.

- (b) (iii) If the Load Zone in question is not modeled as a separate Capacity Zone as a result of the analysis described in Section III.12.4(b)(i) and Section III.12.4(b)(ii), then the ISO shall perform the analysis described in those sections again, except that the following amounts shall also be excluded from the total amount of capacity that is projected to be installed before the start of the relevant Capacity Commitment Period: the quantity of capacity that is subject to Static De-List Bids, Export Bids, and Administrative Export De-List Bids from Lead Market Participants for resources that are not FCM Pivotal Suppliers and Permanent De-List Bids in the instant Forward Capacity Auction. If, with that change, the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period is greater than the Load Zone's Export-Adjusted LSR, then the Load Zone shall not be modeled as a separate Capacity Zone in the Forward Capacity Auction. Otherwise, the import-constrained Load Zone shall be modeled as a separate Capacity Zone in the Forward Capacity Auction.
- (c) Adjacent Load Zones that are neither export-constrained nor import-constrained shall together be modeled as the Rest-of-Pool Capacity Zone.
- (d) In the event a valid transfer limit cannot be determined pursuant to Section III.12.5, the Load Zone with the indeterminate limit will be consolidated into the Rest-of-Pool Capacity Zone.

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- (e) In the event transmission limitations develop such that intra-zonal constraints must be modeled in the Forward Capacity Market, any necessary subdivision of a Load Zone into one or more modeled Capacity Zones will respect the Load Zone boundaries and, to the extent possible, the state retail electric service territories. In that circumstance, references in this Section III.12 to “Load Zone” shall be construed to apply to such subdivisions of a Load Zone as appropriate.
 - (f) Modeled Capacity Zone shall take into account significant changes in transfer limits due to changes in system topology.

III.12.5 Transmission Interface Limits. Transmission interface limits, used in the determination of Local Sourcing Requirements, shall be determined using network models that include all resources, existing transmission lines and proposed transmission lines that the ISO determines, in accordance with Section III.12.6, will be in service no later than the first day of the relevant Capacity Commitment Period. Load modeling assumptions used in determining the transmission interface limits are specified in Section III.12.8. The transmission interface limits shall be calculated assuming simultaneous imports from directly connected Control Areas up to the level of tie benefits that may be assumed over the applicable interface.

Prior to each Forward Capacity Auction, the ISO shall update the transmission interface limits for each internal and external interface for each upcoming Capability Year through the Capacity Commitment Period associated with that Forward Capacity Auction. This update shall take into account any additional transmission projects and elements of transmission projects that are added to the network model pursuant to Section III.12.6. The transmission interface limits shall be established, using deterministic analyses, at levels that provide acceptable thermal, voltage and stability performance of the system both with all lines in service and after any criteria contingency occurs as specified in ISO New England Manuals and ISO New England Administrative Procedures.

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- (e) Any contracts required to procure or construct a transmission project are in place consistent with the critical path schedule. The ISO's analysis may also take into account whether such contracts contain incentive and/or penalty clauses to encourage third parties to advance the delivery of material services to conform with the critical path schedule.
 - (f) Physical site work is on schedule consistent with the critical path schedule.
 - (g) The transmission project is in a designated National Interest Electric Transmission Corridor in accordance with Section 216 of the Federal Power Act, 16 U.S.C. §§ 824p.

III.12.7 Resource Modeling Assumptions.

III.12.7.1 Proxy Units. When the available resources are insufficient for the unconstrained New England Control Area to meet the resource adequacy planning criterion specified in Section III.12.1, proxy units shall be used as additional capacity to determine the Installed Capacity Requirement and the Local Resource Adequacy Requirements. The proxy units shall reflect resource capacity and outage characteristics such that when the proxy units are used in place of all other resources in the New England Control Area, the reliability, or LOLE, of the New England Control Area does not change. The outage characteristics are the summer capacity weighted average availability of the resources in the New England Control Area as determined in accordance with Section III.12.7.3. The capacity of the proxy unit is determined by adjusting the capacity of the proxy unit until the LOLE of the New England Control Area is equal to the LOLE calculated while using the capacity assumptions described in Section III.12.7.2.

When modeling transmission constraints for the determination of Local Resource Adequacy Requirements, the same proxy units may be added to the import-constrained Load Zone or elsewhere in the rest of the New England Control Area depending on where system constraints exist.

III.12.7.2 Capacity. The resources included in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements shall include:

- (a) all Existing Generating Capacity Resources,

For Existing Generating Capacity Resources:

- (a) The most recent five-year moving average of EFORD shall be used as the measure of resource availability used in the calculation of the Installed Capacity Requirement and the Local Resource Adequacy Requirements until the ISO determines that the use of weighted EFORD, pursuant to subsection (b) is appropriate. The most recent five-year moving average of EFORD shall be used as the measure of resource availability for non-peaking resources used in the calculation of Transmission Security Analysis Requirements until the ISO determines that the use of weighted EFORD, pursuant to subsection (b) is appropriate. A deterministic adjustment factor, based on the operational experience of the ISO, shall be used as the measure of resource availability for peaking resources used in the calculation of Transmission Security Analysis Requirements, and will be reviewed periodically.
- (b) Once sufficient data are collected during the ICAP Transition Period, use of weighted EFORD as a transition metric between EFORD and the process for measuring availability in the Forward Capacity Market shall be evaluated and included in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements.
- (c) Once sufficient data are collected under the availability incentives in the Forward Capacity Market, a resource availability metric, which reflects resource availability in a manner that is consistent with the availability incentives in the Forward Capacity Market, shall be developed and reviewed with Governance Participants, the state utility regulatory agencies in New England and, as appropriate, other state agencies and used in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements.

For resources cleared in previous Forward Capacity Auctions or obligated for the relevant Capacity Commitment Period that do not have sufficient data to calculate an availability metric as defined in subsections (a), (b) or (c) above, class average data for similar resource types shall be used.

For Demand Resources and Other Demand Resources, including Real-Time Emergency Generation, in existence during the ICAP Transition Period, historical performance data for those resources will be used to develop an availability metric for use in the calculation of the Installed Capacity Requirement and Local Sourcing Requirements.

III.12.7.4 Load and Capacity Relief. Load and capacity relief expected from system-wide implementation of the following actions during a capacity deficiency (Operating Procedure No. 4) shall be included in the calculation of the Installed Capacity Requirement and the Local Sourcing Requirements. The Installed Capacity Requirements and Local Sourcing Requirements shall reflect the impact of the following actions during a capacity deficiency which are specified in the ISO New England Manuals and ISO New England Administrative Procedures:

Unit shall determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues other than capacity revenues. The Internal Market Monitoring Unit will consider reductions in costs such as reduced taxes in determining expected net revenues. Expected net revenues considered in this determination shall only include net revenues that are: (i) tradeable throughout the New England Control Area or not restricted to resources within a particular state or other geographic sub-region; and (ii) available to all resources of the same physical type within the New England Control Area, regardless of the resource owner. Expected net revenues shall include economic development incentives that are offered broadly by state or local government and that are not expressly intended to reduce prices in the Forward Capacity Market. In estimating expected net revenue from other markets, the Internal Market Monitoring Unit shall consider whether any contract revenues relied on by the New Generating Capacity Resource reasonably represent the market price for the non-capacity products or services provided. If the Internal Market Monitoring Unit determines that the offer is not consistent with the long run average costs net of expected net revenues other than capacity revenues, as described above, then the amount of capacity clearing from that offer shall be considered Out-of-Market Capacity for purposes of determining the applicability of the Alternative Capacity Price Rule, as discussed in Section III.13.2.7.8. Sufficient documentation and information must be included in the resource's qualification package to allow the Internal Market Monitoring Unit to make such a determination. Such documentation should include all relevant financial estimates and cost projections for the project, including the project's pro-forma financing support data.

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

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 Monitoring Unit shall review each bid made pursuant to this Section III.13.1.2.2.5.2, and if the Internal Market Monitoring Unit 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

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 0.8 times CONE are subject to review by the Internal Market Monitoring Unit 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

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

Monitoring Unit Review of De-List Bids. The Internal Market Monitoring Unit 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. If the Internal Market Monitoring Unit 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 Monitoring Unit 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, 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 Monitoring Unit review and the resource's net risk-

adjusted going forward costs and opportunity costs as determined by the Internal Market Monitoring Unit. 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 Monitoring Unit'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 Monitoring Unit restrict the ability of the resource to dynamically de-list at prices below 0.8 times CONE.

III.13.1.2.3.2.1.2. Net Risk-Adjusted Going Forward Costs. A Static De-List Bid, Export Bid above 0.8 times CONE, or Permanent De-List Bid above 1.25 times CONE shall be considered consistent with the Existing Generating Capacity Resource's net

adjustments submitted,
provided the costs are based
on known and measurable
conditions and supported by
appropriate documentation to
reflect those costs.

$CQ_{\text{Summer,kW}}$ = 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:

$$RF = [(RPC \times EFORD) + (P \times (\text{Forward Capacity Auction Starting Price} - \text{FCAFP}) \times 12, \text{months})] \times CQ_{\text{Summer,kW}}$$

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

III.13.1.2.3.2.3. Administrative Export De-List

Bids. The Internal Market Monitoring Unit 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 Monitoring Unit 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.

may not change offers below 0.75 times CONE or supporting documentation after the New Capacity Qualification Deadline.

- (b) The Internal Market Monitoring Unit shall review each offer from New Demand Resources below 0.75 times CONE. The Internal Market Monitoring Unit shall determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues for its Demand Reduction Value other than capacity revenues. The Internal Market Monitoring Unit will consider reductions in costs such as reduced taxes in determining expected net revenues. Expected net revenues considered in this determination shall only include net revenues that are: (i) tradeable throughout the New England Control Area or not restricted to resources within a particular state or other geographic sub-region; and (ii) available to all resources of the same physical type within the New England Control Area, regardless of the resource owner. Expected net revenues shall include economic development incentives that are offered broadly by state or local government and that are not expressly intended to reduce prices in the Forward Capacity Market. In estimating expected net revenues other than capacity revenues, the Internal Market Monitoring Unit shall consider whether any contract revenues relied on by the New Demand Resource reasonably represent the market price for the non-capacity products or services provided. If the Internal Market Monitoring Unit determines that the offer is not consistent with the long run average costs net of expected net revenues for its Demand

Emergency Generation Demand Resources shall submit an Updated Measurement and Verification Plan to the ISO no later than 5 business days after receipt of the Qualified Capacity notification to establish the summer and winter Qualified Capacity amounts of their resources. Such Updated Measurement and Verification Plans shall use the results of the ISO's most recent Demand Resource Operable Capacity Analysis in determining summer and winter Qualified Capacity amounts. To the extent the ISO's most recent Demand Resource Operable Capacity Analysis includes location-specific estimates of Demand Resource Critical Peak Hours, Real-Time Demand Response Event Hours, and/or Real-Time Emergency Generation Event Hours, the Updated Measurement and Verification Plans shall use the appropriate location-specific estimates of such hours in determining summer and winter Qualified Capacity amounts. Such Qualified Capacity amounts shall at least be based on the quantities of Demand Resources that cleared in the most recent Forward Capacity Auction. If the Market Participant does not submit an Updated Measurement and Verification Plan that uses the ISO's most recent Demand Resource Operable Capacity Analysis, which is at least based on the quantities of Demand Resources that cleared in the most recent Forward Capacity Auction, in determining summer and winter Qualified Capacity amounts within 5 business days after receipt of the Qualified Capacity notification, a Permanent De-list Bid shall be entered at the Forward Capacity Auction Starting Price for the Demand Resource.

Capacity Zone modeled as an export-constrained Capacity Zone, the lesser of the amount of capacity offered in the Capacity Zone at that price (excluding capacity offered from New Import Capacity Resources and Existing Import Capacity Resources) or the Capacity Zone's Maximum Capacity Limit) plus (for each interface between the New England Control Area and an external Control Area, the lesser of that interface's approved capacity transfer limit (net of tie benefits) or the amount of capacity offered from New Import Capacity Resources and Existing Import Capacity Resources). In computing the Total System Capacity, the total capacity associated with any Capacity Zone at any price greater than the Forward Capacity Auction Starting Price for that Capacity Zone is taken to be the total capacity at the Forward Capacity Auction Starting Price for that Capacity Zone. In no event shall the Capacity Clearing Price for a Capacity Zone be greater than the Forward Capacity Auction Starting Price for that Capacity Zone. On the basis of these aggregate supply curves, the auctioneer shall determine the outcome of the round for each modeled Capacity Zone as follows:

(a) **Import-Constrained Capacity Zones.**

- (1) For a Capacity Zone modeled as an import-constrained Capacity Zone pursuant to Section III.12.4(b)(ii), if either of the following two conditions is met during the round:
 - (i) the aggregate supply curve for the import-constrained Capacity Zone, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals

included in the next round of the Forward Capacity Auction.

- (2) For a Capacity Zone modeled as an import-constrained Capacity Zone pursuant to Section III.12.4(b)(iii), if either of the following two conditions is met during the round:
 - (i) the aggregate supply curve for the import-constrained Capacity Zone, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals or is less than the Capacity Zone's Local Sourcing Requirement, adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions) and, if the quantity of Static De-List Bids, Export Bids, and Administrative Export De-List Bids from resources that are not FCM Pivotal Suppliers that have either cleared or been rejected for reliability reasons and Permanent De-List Bids that have either cleared or been rejected for reliability reasons in the instant Forward Capacity Auction is less than the difference between the total amount of capacity that is projected to be installed in the import-constrained Load Zone before the start of the relevant Capacity Commitment Period and the Export-Adjusted LSR, adjusted to include the quantity of cleared Static De-List Bids, Export Bids, and Administrative Export De-List Bids from FCM Pivotal Suppliers; or
 - (ii) the Total System Capacity, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals or is less than the Installed Capacity Requirement (net of HQICCs), adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions);

then the Forward Capacity Auction for that Capacity Zone is concluded, except as required to minimize the total cost for the associated Capacity Commitment Period, as described in Section III.13.2.7, and such Capacity Zone will not be included in further rounds of the Forward Capacity Auction. The Capacity Clearing Price for that Capacity Zone shall be set at the highest price at which either of the two conditions above are satisfied, subject to the other provisions of this Section III.13.2. If neither of the two conditions above are met in the round, then the auctioneer shall publish the quantity of system-wide excess supply at the End-of-Round Price (the amount of capacity offered at the End-of-Round Price in all modeled Capacity Zones minus the Installed Capacity Requirement (net of HQICCs)) and the quantity of capacity from Demand Resources by type at the End-of-Round Price, and that Capacity Zone will be included in the next round of the Forward Capacity Auction.

- (b) **Rest-of-Pool Capacity Zone.** For the Rest-of-Pool Capacity Zone, if the Total System Capacity, adjusted as necessary in accordance with Section III.13.2.6 (Capacity Rationing Rule), equals or is less than the Installed Capacity Requirement (net of HQICCs), adjusted as necessary in accordance with Section III.13.2.5.2 (replacement provisions) in the round, then the Forward Capacity Auction for the Rest-of-Pool Capacity Zone is concluded, except as required to minimize the total cost for the associated Capacity Commitment Period, as described in Section III.13.2.7, and the Rest-of-Pool Capacity Zone will not be included in further rounds of the Forward Capacity Auction. The Capacity Clearing Price for the Rest-of-Pool Capacity Zone shall be

set at the highest price at which the Total System Capacity is less than or equal to the Installed Capacity Requirement (net of HQICCs), subject to the other provisions of this Section III.13.2. If the Total System Capacity exceeds the Installed Capacity Requirement (net of HQICCs) at the End-of-Round Price, then the auctioneer shall publish the quantity of system-wide excess supply at the End-of-Round Price (the amount of capacity offered at the End-of-Round Price in all modeled Capacity Zones minus the Installed Capacity Requirement (net of HQICCs)) and the quantity of capacity from Demand Resources by type at the End-of-Round Price, and the Rest-of-Pool Capacity Zone will be included in the next round of the Forward Capacity Auction.

Prices as a result of constraints between modeled Capacity Zones binding in the running of the Forward Capacity Auction. Where a modeled constraint does not bind in the Forward Capacity Auction, and as a result adjacent modeled Capacity Zones clear at the same Capacity Clearing Price, those modeled Capacity Zones shall be a single Capacity Zone used for all purposes of the relevant Capacity Commitment Period, including for the purposes of reconfiguration auctions and Capacity Supply Obligation Bilaterals.

III.13.2.4. Starting Price and Determination of CONE.

- (a) Each Capacity Zone modeled in a Forward Capacity Auction shall have a Forward Capacity Auction Starting Price. The Forward Capacity Auction Starting Price for a Capacity Zone in the Forward Capacity Auction for the Capacity Commitment Periods beginning on June 1, 2013, June 1, 2014, and June 1, 2015 shall equal two times the CONE applicable to that Capacity Zone. The Forward Capacity Auction Starting Price for each Capacity Zone in the Forward Capacity Auction for the Capacity Commitment Period beginning on June 1, 2016 shall be \$15/kW-month. Thereafter, the Forward Capacity Auction Starting Price will be adjusted after each Forward Capacity Auction using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs.
- (b) In the Forward Capacity Auction for the Capacity Commitment Period beginning on June 1, 2013, the CONE applicable to each Capacity Zone shall be \$4.918/kW-month.

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- (c) After each Forward Capacity Auction, the CONE for each Capacity Zone to be used in the next Forward Capacity Auction shall be the sum of (70% of the Capacity Zone's CONE from the previous Forward Capacity Auction) plus (30% of the Capacity Zone's Capacity Clearing Price from the previous Forward Capacity Auction); provided, however, that if any of the following conditions are met, then the Capacity Zone's CONE for the next Forward Capacity Auction shall be the same as the Capacity Zone's CONE used in the previous Forward Capacity Auction, adjusted using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs:
- (i) the price is set pursuant to the Capacity Clearing Price Floor described in Section III.13.2.7.3 or pursuant to one of the Alternative Capacity Price Rules described in Section III.13.2.7.8;
 - (ii) the amount of New Capacity Required in the Capacity Zone in the previous Forward Capacity Auction is no greater than zero (in an import-constrained Capacity Zone, "New Capacity Required" shall mean the Capacity Zone's Local Sourcing Requirement, minus the total amount of capacity of Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources in the Capacity Zone (that is not permanently de-listed for the Capacity Commitment Period), minus capacity otherwise obligated in the Capacity Zone for the Capacity Commitment Period; in the Rest-of-Pool Capacity Zone, "New Capacity Required" shall mean the Installed Capacity Requirement (net of HQICCs), minus the Local Sourcing Requirement of each modeled

import-constrained Capacity Zone, minus, for each modeled export-constrained Capacity Zone, the lesser of the Capacity Zone's Maximum Capacity Limit or the total amount of capacity of Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources in the Capacity Zone (that is not permanently de-listed for the Capacity Commitment Period), minus the total amount of capacity of Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources in the Rest-of-Pool Capacity Zone (that is not permanently de-listed for the Capacity Commitment Period), minus capacity otherwise obligated in the Rest-of-Pool Capacity Zone for the Capacity Commitment Period);

- (iii) the previous Forward Capacity Auction was not a Successful FCA in the Capacity Zone;
- (iv) the Capacity Clearing Price in the Capacity Zone in the previous Forward Capacity Auction was set by a New Import Capacity Resource or Existing Import Capacity Resource; or
- (v) the Capacity Clearing Price in the Capacity Zone in the previous Forward Capacity Auction was set by a resource qualifying as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.3 (incremental output) or Section III.13.1.1.1.4 (derated capacity that is restored).

- (d) If a Capacity Zone that experienced price separation in any previous Forward Capacity Auction is either not included in a subsequent Forward Capacity Auction or does not experience price separation in that subsequent Forward Capacity Auction, its CONE will be updated using the Capacity Clearing Price of the Capacity Zone in which it was included in that subsequent Forward Capacity Auction.
- (e) The CONE for each Capacity Zone that is determined pursuant to the provisions of this Section III.13.2.4 shall be used for all purposes associated with the Capacity Commitment Period associated with the Forward Capacity Auction for which the CONE was determined. References in this Section III.13 to CONE shall mean the CONE applicable to the relevant Capacity Zone or modeled Capacity Zone for the relevant Capacity Commitment Period.

III.13.2.5. Treatment of Specific Offer and Bid Types in the Forward Capacity Auction.

III.13.2.5.1. Offers from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources. A New Capacity Offer (other than one from a Conditional Qualified New Generating Capacity Resource) clears (receives a Capacity Supply Obligation for the associated Capacity Commitment Period) in the Forward Capacity Auction if the Capacity Clearing Price is greater than or equal to the price specified in the offer, except possibly as a result of the Capacity Rationing Rule described in Section III.13.2.6. Starting with the fourth auction, an offer from a Conditional Qualified New Generating Capacity Resource clears (receives a Capacity Supply Obligation for the associated Capacity Commitment

the Capacity Clearing Price in an import-constrained Capacity Zone is less than the Capacity Clearing Price in the Rest-of-Pool Capacity Zone, all resources clearing in the import-constrained Capacity Zone shall be paid based on the Capacity Clearing Price in the Rest-of-Pool Capacity Zone during the associated Capacity Commitment Period.

III.13.2.7.2. Export-Constrained Capacity Zone Capacity

Clearing Price Ceiling. The Capacity Clearing Price in an export-constrained Capacity Zone shall not be higher than the Capacity Clearing Price in the Rest-of-Pool Capacity Zone. If after the Forward Capacity Auction is conducted, the Capacity Clearing Price in an export-constrained Capacity Zone is higher than the Capacity Clearing Price in the Rest-of-Pool Capacity Zone, all resources clearing in the export-constrained Capacity Zone shall be paid based on the Capacity Clearing Price in the Rest-of-Pool Capacity Zone during the associated Capacity Commitment Period.

III.13.2.7.3. Capacity Clearing Price Floor. In the Forward Capacity Auctions for the Capacity Commitment Period beginnings on June 1, 2013, June 1, 2014, and June 1, 2015 only, the following additional provisions regarding the Capacity Clearing Price shall apply in all Capacity Zones (and in the application of Section III.13.2.3.3(d)(iii)):

- (a) [Reserved.]

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- (b) The Capacity Clearing Price shall not fall below 0.6 times CONE. Where the Capacity Clearing Price reaches 0.6 times CONE, offers shall be prorated such that no more than the Installed Capacity Requirement (net of HQICCs) is procured in the Forward Capacity Auction, as follows:
- (i) The total payment to all listed capacity resources during the associated Capacity Commitment Period shall be equal to 0.6 times CONE times the Installed Capacity Requirement (net of HQICCs) applicable in the Forward Capacity Auction.
 - (ii) Payments to individual listed resources shall be prorated based on the total number of MWs of capacity clearing in the Forward Capacity Auction (receiving a Capacity Supply Obligation for the associated Capacity Commitment Period).
 - (iii) Suppliers may instead prorate their bid MWs of participation in the Forward Capacity Market by partially de-listing one or more resources. Regardless of any such proration, the full amount of capacity that cleared in the Forward Capacity Auction will be ineligible for treatment as new capacity in subsequent Forward Capacity Auctions (except as provided under Section III.13.1.1.1.2).
 - (iv) Any proration shall be subject to reliability review. Where proration is rejected for reliability reasons, the resource's payment shall not be prorated as described in subsection (ii) above, and the difference between its actual payment based on the Capacity Clearing Price and what its payment would have been had proration not been rejected for reliability reasons shall be allocated to Network Load within the affected Reliability Region. In this case, the total payment described in subsection (i) above will increase accordingly.

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- (v) Any election to prorate bid MWs associated with a New Capacity Offer that clears in the Forward Capacity Auction shall also apply 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 Section III.13.1.1.2.2.4 or Section III.13.1.4.2.2.5.
 - (c) Where the Capacity Clearing Price reaches 0.6 times CONE, if the amount of capacity offered from New Import Capacity Resources and Existing Import Capacity Resources over an interface between an external Control Area and the New England Control Area is greater than that interface's approved capacity transfer limit (net of tie benefits, or net of HQICC in the case of the HQ Interconnection):
 - (i) the full amount of capacity offered at that price from Existing Import Capacity Resources associated with contracts listed in Section III.13.1.3.3(c) shall clear; and
 - (ii) the capacity offered at that price from New Import Capacity Resources and Existing Import Capacity Resources other than Existing Import Capacity Resources associated with the contracts listed in Section III.13.1.3.3(c) will be prorated such that the interface's approved capacity transfer limit (net of tie benefits, or net of HQICC in the case of the HQ Interconnection) is not exceeded.
 - (iii) Capacity remaining after the treatment described in Sections III.13.2.7.3(c)(i) and III.13.2.7.3(c)(ii) shall be subject to the proration described in Section III.13.2.7.3(b).

III.13.2.7.4. Effect of Capacity Rationing Rule on Capacity

Clearing Price. Where the requirement that offers and bids clear or not clear in whole (Section III.13.2.6) prohibits the descending clock auction in its normal progression from clearing a Capacity Zone at the precise amount of capacity required, then the auctioneer shall analyze the aggregate supply curve to determine whether to clear more excess capacity at a lower Capacity Clearing Price or to clear less or no excess capacity at a higher Capacity Clearing Price, and shall choose the alternative that results in procuring at least the amount of capacity required while seeking to minimize the total cost for the associated Capacity Commitment Period by enumerating as many combinations of non-rationable offers and bids as practicable. De-list bids that would not be replaced in full upon clearing (Permanent De-List Bids when the Capacity Clearing Price is above 1.25 times CONE, Static De-List Bids, and Export Bids) will not clear if they are below the Capacity Clearing Price. In an import-constrained Capacity Zone, the cost minimization will not consider blocks of capacity not needed to meet the import-constrained Capacity Zone's Local Sourcing Requirement when price separation occurs between the import-constrained Capacity Zone and the Rest-of-Pool Capacity Zone. The cost minimization may result in offers below the Capacity Clearing Price not clearing, and in certain de-list bids (Permanent De-List Bids when the Capacity Clearing Price is equal to or below 1.25 times CONE and Dynamic De-List Bids) below the Capacity Clearing Price clearing.

III.13.2.7.5. Effect of Decremental Repowerings on the

Capacity Clearing Price. Where the effect of accounting for certain repowering offers and bids (as described in Section III.13.2.3.2(e)) results in the auction not clearing at the lowest price for the required quantity of capacity, then the auctioneer will conduct additional auction rounds of the Forward Capacity Auction as necessary to minimize total capacity costs.

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- (d) The offer associated with the Project Sponsor having the lower market share in the capacity auction (including Existing Generating Capacity Resources, Existing Import Capacity Resources, and Existing Demand Resources) shall be cleared.

III.13.2.7.8. Alternative Capacity Price Rules. In no case will the application of any of the three alternative price mechanisms described in this Section III.13.2.7.8 result in lowering the Capacity Clearing Price that otherwise results from the Forward Capacity Auction.

III.13.2.7.8.1. First Alternative Price Rule (“APR-1”).

III.13.2.7.8.1.1. Trigger. APR-1 shall be triggered in an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone if all of the following conditions are met:

- (a) the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction in the Capacity Zone is greater than zero;
- (b) there is not Inadequate Supply in the Forward Capacity Auction (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone); and
- (c) at the Capacity Clearing Price, the amount of Out-of-Market Capacity in the Capacity Zone exceeds the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction in the Capacity Zone, where the amount of Out-of-Market Capacity shall be the sum of the following amounts:

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- (i) **ISO RFPs.** The quantity of any capacity procured in the Capacity Zone through an RFP issued by the ISO for the Capacity Commitment Period associated with the current Forward Capacity Auction.
 - (ii) **Certain New Capacity Offers.** The quantity of capacity cleared from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources for the Capacity Zone below 0.75 times CONE that were found by the Internal Market Monitoring Unit to be ineligible to set the Capacity Clearing Price pursuant to Sections III.13.1.1.2.6, III.13.1.3.5.6.2, and III.13.1.4.2.4.
 - (iii) **Permanent De-List Bids and Non-Price Retirement Requests rejected for Reliability Reasons.** The MW quantity of Permanent De-List Bids and Non-Price Retirement Requests Rejected for reliability reasons in the Capacity Zone in the Forward Capacity Auction.
 - (iv) **New Self-Supplied FCA Resources.** The quantity of capacity from New Generating Capacity Resources and New Import Capacity Resources designated as Self-Supplied FCA Resources in the Capacity Zone.

III.13.2.7.8.1.2. Pricing. If APR-1 is triggered, then the Capacity Clearing Price for that Capacity Zone shall be the lesser of: (1) \$0.01 below the price at which the last remaining New Generating Capacity Resource, New Import Capacity Resource, or New Demand Resource in the Capacity Zone (not including those addressed in Section III.13.2.7.8.1(c)(ii)) withdrew from the Forward Capacity Auction; or (2) CONE;

provided, however, that if in the Capacity Zone there is Insufficient Competition (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide in the case of the Rest-of-Pool Capacity Zone) and all capacity offered from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources at the Forward Capacity Auction Starting Prices is still included in the aggregate supply curve, then the Capacity Clearing Price shall equal CONE.

III.13.2.7.8.2. Second Alternative Price Rule (“APR-2”).

III.13.2.7.8.2.1. Trigger. APR-2 shall be triggered in an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone if all of the following conditions are met:

- (a) the sum of the amount of New Capacity Required plus the amount of Permanent De-List bids clearing in the Forward Capacity Auction in the Capacity Zone is less than or equal to zero; and

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- (b) there is not Inadequate Supply in the Forward Capacity Auction (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone); and
 - (c) at the Capacity Clearing Price, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction plus the amount of Carried Forward Excess Capacity in the Capacity Zone is greater than zero , where the amount of Carried Forward Excess Capacity shall be the sum of the following two amounts:
 - (i) **Carried Forward Excess Out-of-Market Capacity.** The Carried Forward Excess Out-of-Market Capacity shall be calculated as follows, but in no case will it be less than zero. The Carried Forward Excess Out-of-Market Capacity for the first three Forward Capacity Auctions shall be zero. In the calculation of Carried Forward Excess Out-of-Market Capacity, past excess Out-of-Market Capacity shall not carry forward for more than six years (hence it will apply in no more than seven Forward Capacity Auctions).

- (a) If in the previous Forward Capacity Auction, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in that Forward Capacity Auction is greater than zero, then the Carried Forward Excess Out-of-Market Capacity shall be the difference between the amount of Out-of-Market Capacity in the previous Forward Capacity Auction and the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in that previous Forward Capacity Auction.
- (b) If in the previous Forward Capacity Auction, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in that Forward Capacity Auction is less than or equal to zero, then the Carried Forward Excess Out-of-Market Capacity shall be the sum of the amount of Out-of-Market Capacity in the previous Forward Capacity Auction plus the lesser of: (i) the Carried Forward Excess Out-of-Market Capacity from the previous Forward Capacity Auction; or (ii) the absolute value of the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the previous Forward Capacity Auction.

- (ii) **Capacity Carried Forward Due to Rationing.** If the Capacity Zone is import-constrained and was also import-constrained in the previous Forward Capacity Auction, the amount of capacity above the Local Sourcing Requirement procured in that Capacity Zone in the previous Forward Capacity Auction as a result of the Capacity Rationing Rule.

III.13.2.7.8.2.2. Pricing. If APR-2 is triggered, then the Capacity Clearing Price for the Capacity Zone shall be the lesser of: (1) \$0.01 below the price at which

the last remaining New Generating Capacity Resource, New Import Capacity Resource, or New Demand Resource in the Capacity Zone (not including those addressed in Section III.13.2.7.8.2(c)(ii)) withdrew from the Forward Capacity Auction; or (2) CONE; provided, however, that if in the Capacity Zone there is Insufficient Competition (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone) and no capacity offered from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources has been withdrawn from the Forward Capacity Auction, then the Capacity Clearing Price shall equal CONE.

III.13.2.7.8.3. Third Alternative Price Rule (“APR-3”)

III.13.2.7.8.3.1. Trigger. For all Forward Capacity Auctions not subject to a floor price (as described in Section III.13.2.7.3), APR-3 shall be triggered in an import-constrained Capacity Zone or the Rest-of-Pool Capacity Zone if all of the following conditions are met:

- (a) the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction in the Capacity Zone is less than or equal to zero;
- (b) there is not Inadequate Supply in the Forward Capacity Auction (in the Capacity Zone, in the case of an import-constrained Capacity Zone, or system-wide, in the case of the Rest-of-Pool Capacity Zone);

- (c) at the Capacity Clearing Price, the sum of the amount of New Capacity Required plus the amount of Permanent De-List Bids clearing in the Forward Capacity Auction plus the amount of Carried Forward Excess Capacity in the Capacity Zone is less than or equal to zero, where the amount of Carried Forward Excess Capacity shall be calculated as described in Section III.13.2.7.8.2.1(c); and
- (d) one or more Non-Price Retirement Request, Permanent De-List Bid, Static De-List Bid, Export Bid, Administrative Export De-List Bid, or Dynamic De-List Bid was rejected in the instant Forward Capacity Auction for reliability reasons pursuant to Section III.13.2.5.2.5.

III.13.2.7.8.3.2. Pricing. If APR-3 is triggered, and if the price in the Forward Capacity Auction is at or below 0.6 times CONE, then the Capacity Clearing Price in that Capacity Zone will be determined by the intersection of the aggregate supply curve as described in Section III.13.2.3.3 and a demand curve where each price / quantity pair results in the same total costs as the price described in subsection (a) below multiplied by the quantity demanded at that price.

- (a) The price at which the excess capacity remaining in the Forward Capacity Auction in that Capacity Zone is less than or equal to the total quantity of capacity associated with all Non-Price Retirement Requests, Permanent De-List Bids, Static De-List Bids, Export Bids, Administrative Export De-List Bids, or Dynamic De-List Bids rejected for reliability reasons pursuant to Section III.13.2.5.2.5.

III.13.2.7.9. [Reserved.]

III.13.2.8. Inadequate Supply and Insufficient Competition. In the case of either Inadequate Supply or Insufficient Competition, as defined in this Section III.13.2.8, the Forward Capacity Auction shall still be used to the extent possible; that is, the remedy for Inadequate Supply or Insufficient Competition shall be limited to the Capacity Zones having Inadequate Supply or Insufficient Competition.

III.13.2.8.1. Inadequate Supply.

III.13.2.8.1.1. Inadequate Supply in an Import-Constrained Capacity Zone. An import-constrained Capacity Zone will be considered to have Inadequate Supply if at the Forward Capacity Auction Starting Price the amount of capacity offered in the import-constrained Capacity Zone through New Capacity Offers is less than the amount of New Capacity Required in that Capacity Zone.

- (a) Where an import-constrained Capacity Zone has Inadequate Supply, Existing Generating Capacity Resources, Existing Import Capacity

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. Demand Resources may not submit Supply Offers into the Day-Ahead Energy Market or Real-Time Energy Market.

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 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.13.7. Performance, Payments and Charges in the Forward Capacity

Market. 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 ownership of a resource that has a Capacity Supply Obligation, the Capacity Supply Obligation shall remain associated with the resource and the new resource owner shall be bound by all provisions of this Section III.13 arising from such Capacity Supply Obligation. The owner of 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.

-
- for each modeled export-constrained Capacity Zone;
- (v) the multipliers applied in determining the Capacity Value of a Demand Resource, as described in Section III.13.7.1.5.1;
 - (vi) which resources are accepted and rejected in the qualification process to participate in the Forward Capacity Auction;
 - (vii) the Internal Market Monitoring Unit's determinations regarding each offer below 0.75 times CONE, including information regarding each of the elements considered in the Internal Market Monitoring Unit's determination of expected net revenues (other than revenues from ISO-administered markets) and whether that element was included or excluded in the determination of whether the offer is consistent with the resource's long run average costs net of expected net revenues other than capacity revenues; and
 - (viii) the Internal Market Monitoring Unit's determinations regarding offers or bids submitted during the qualification process made according to the provisions of this Section III.13, including an explanation of the reasons for rejecting any de-list bids based on the Internal Market Monitoring Unit review and the resource's net risk-adjusted going forward costs and opportunity costs as determined by the Internal Market Monitoring Unit. The filing shall identify to the extent possible the components of the bid which were accepted as justified, and shall also identify to the extent possible the components of the bid which were not justified and which resulted in rejection of the bid.
- (b) Any comments or challenges to the determinations contained in the informational filing described in Section III.13.8.1(a), and any election made pursuant to Section III.13.1.2.3.2.1.1, must be filed with the Commission no later than 15 days after the ISO's submission of the informational filing. No later than 15 days after the ISO's submission of the informational

filing described in Section III.13.8.1(a), the Lead Market Participant must also notify the ISO of any election made pursuant to Section III.13.1.2.3.2.1.1. If the Commission does not issue an order within 75 days after the ISO's submission of the informational filing that directs otherwise, the determinations contained in the informational filing and elections made pursuant to Section III.13.1.2.3.2.1.1 shall be used in conducting the Forward Capacity Auction, and challenges to Capacity Clearing Prices resulting from the Forward Capacity Auction shall be reviewed in accordance with the provisions of Section III.13.8.2(c). If within 75 days after the ISO's submission of the informational filing, the Commission does issue an order modifying one or more of the ISO's determinations, then the Forward Capacity Auction shall be conducted no earlier than 15 days following that order using the determinations as modified by the Commission (unless the Commission directs otherwise), and challenges to Capacity Clearing Prices resulting from the Forward Capacity Auction shall be reviewed in accordance with the provisions of Section III.13.8.2(c).

III.13.8.2. Filing of Forward Capacity Auction Results and Challenges Thereto.

- (a) As soon as practicable after the Forward Capacity Auction is complete, the ISO shall file the results of that Forward Capacity Auction with the Commission pursuant to Section 205 of the Federal Power Act, including the final set of Capacity Zones resulting from the auction, the Capacity Clearing Price in each of those Capacity Zones (and the Capacity Clearing Price associated with certain imports pursuant to Section III.13.2.3.3(d), if applicable), and a list of which resources received Capacity Supply Obligations in each Capacity Zone and the amount of those Capacity Supply Obligations. Upon completion of the fourth and future auctions, such list of resources that receive Capacity Supply Obligation shall also specify which resources cleared as Conditional Qualified New Generating Capacity Resources. Upon completion of the fourth and future auctions, the filing shall also list each Long Lead Time Generating Facility, as defined in Schedule 22 of Section II

ATTACHMENT 3

Testimony of Robert G. Ethier

On behalf of the ISO

1 have worked with the ISO in various roles and was responsible for Market
2 Monitoring for nearly four years and Resource Adequacy for more than two years
3 prior to becoming Vice President of Market Development.

4

5 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
6 **PROCEEDING?**

7 **A.** The purpose of this testimony is to explain some of the substantive changes made
8 in this filing (“Rule Changes”) to the provisions of the ISO Transmission,
9 Markets and Services Tariff (“Tariff”) that govern the Forward Capacity Market
10 (“FCM”). In particular, my testimony will address the Rule Changes related to:
11 the Alternative Capacity Price Rule (“APR”); extension of the Forward Capacity
12 Auction floor price; compensation for resources where a prorationing election is
13 rejected for reliability reasons; decoupling the Forward Capacity Auction Starting
14 Price from the cost of new entry (“CONE”); additional modeling of Capacity
15 Zones; and clarification regarding the ISO’s requests for energy from unobligated
16 capacity.

17 .

18 In his testimony, David LaPlante, Vice President of the Internal Market
19 Monitoring Unit, discusses Rule Changes covering the review of offers below
20 0.75 times CONE, the ISO’s reporting obligations and the Pivotal Supplier test.
21 The testimony of Mark G. Karl, Senior Director of Resource Adequacy with the
22 ISO, describes the Rule Changes related to how potential Capacity Zones are
23 modeled for a Forward Capacity Auction (sometimes referred to herein as

1 “FCA”), and the methodology for calculating the Local Sourcing Requirement for
2 an import-constrained zone.

3

4 **II. DISCUSSION OF MARKET RULE CHANGES**

5 **A. ALTERNATIVE CAPACITY PRICE RULE**

6

7 **Q: WHAT IS THE ROLE OF THE ALTERNATIVE CAPACITY PRICE**
8 **RULE IN THE FORWARD CAPACITY MARKET DESIGN?**

9 **A.** The Alternative Capacity Price Rule is designed to set an administrative capacity
10 price that reflects the cost of a new resource willing to enter the market in
11 circumstances when Out-of-Market (“OOM”) capacity completely satisfies the
12 need for new resources in the Forward Capacity Auction. OOM capacity is
13 capacity that offers into the capacity market at prices below its “true” cost of
14 providing capacity. An example would be a resource that has a long-term
15 capacity contract that covers its total costs, after accounting for net energy and
16 ancillary service revenues, and so has no incentive to reflect those costs in its
17 capacity market offer. Thus, in-market resource behavior in the Forward
18 Capacity Auction is based on costs and expectations of future market revenues,
19 while OOM resources are able to count on contractual or non-market revenues
20 and thereby stay in the auction at relatively low prices. The Alternative Capacity
21 Price Rule is designed to adjust the Forward Capacity Auction price in a way that
22 offsets the effect of OOM resources.

1 Ensuring that the Forward Capacity Auction price reflects new entry costs when
2 new entry is needed is important for the long-run efficiency of the Forward
3 Capacity Market. If Forward Capacity Auction prices do not reflect new entry
4 costs in years when new entry is needed, and are therefore too low, new entrants
5 will reasonably require a higher price in future years when the new entrants do set
6 price. New entrants will require a higher price because, on average, they must
7 expect to cover their costs in order to enter the market. Higher new entry costs
8 would balance lower prices set by OOM resources. The combination of too-low
9 prices in some years and too-high prices in other years will increase the risk of
10 participating in the market. This increased market risk will be reflected in
11 generally higher offers from new resources seeking to enter the market in the
12 future, and will raise Forward Capacity Auction prices, on average, above what
13 they would be if the market were less risky. This increased risk, and subsequently
14 higher prices, provides no long-run benefit to consumers and only increases the
15 amount that is paid for capacity. The Alternative Capacity Price Rule is intended
16 to reduce the risk in the Forward Capacity Market and thereby lower capacity
17 costs paid by consumers. Both PJM and NYISO have similar capacity market
18 mechanisms.

19

20 **Q: WHY DOES THE ISO BELIEVE THAT CHANGES TO THE EXISTING**
21 **ALTERNATIVE CAPACITY PRICE RULE ARE NECESSARY?**

22 **A.** The Rule Changes modify the Alternative Capacity Price Rule for two primary
23 reasons. First, the Internal Market Monitor's report on the first two Forward

1 Capacity Auctions (“Internal Market Monitor Report”) noted a deficiency in the
2 current Alternative Capacity Price Rule provisions. Specifically, the Internal
3 Market Monitor Report noted that large quantities of OOM megawatts in one year
4 could displace new entrants in subsequent years. This would depress Forward
5 Capacity Auction prices in the manner described above. The current Alternative
6 Capacity Price Rule looks only at OOM megawatts entering the market in the
7 instant Forward Capacity Auction, and does not consider OOM megawatts from
8 previous years that may nonetheless affect the price in the instant Forward
9 Capacity Auction. The instant rule changes fix this deficiency. Second, the
10 current Alternative Capacity Price Rule does not account for de-list bids that are
11 rejected for reliability reasons. As discussed below, in some cases such bids
12 should be permitted to trigger administrative pricing.

13

14 **Q: PLEASE DESCRIBE THE THREE ALTERNATIVE CAPACITY PRICE**
15 **RULES UNDER THE RULE CHANGES.**

16 **A.** The currently-existing Alternative Capacity Price Rule will now be referred to as
17 “APR-1,” and the two new provisions described below will be referred to as
18 “APR-2” and “APR-3.” The triggering conditions of the three Alternative
19 Capacity Price Rules are non-overlapping, such that only one of the rules could be
20 triggered in any one Forward Capacity Auction.

21

22 APR-1 applies when new capacity is needed in the Forward Capacity Auction
23 (*i.e.*, existing capacity is less than the projected capacity requirement), but that

1 need is completely met by new OOM megawatts in the current Forward Capacity
2 Auction.

3
4 APR-2 applies when new capacity is not needed in the Forward Capacity Auction,
5 but would have been needed if not for the entry of OOM megawatts in previous
6 Forward Capacity Auctions.

7
8 APR-3 applies when new capacity is not needed in the Forward Capacity Auction
9 even without the OOM megawatts that entered the market in previous FCAs, but
10 when the FCA price is depressed as a result of de-list bids that are rejected for
11 reliability reasons.

12

13 **Q: PLEASE DISCUSS THE CHANGES TO THE FIRST ALTERNATIVE**
14 **CAPACITY PRICE RULE UNDER SECTION III.13.2.7.8.1 OF THE**
15 **TARIFF.**

16 **A.** Under the Rule Changes, APR-1 is a slightly revised version of the currently-
17 effective Alternative Capacity Price Rule. While the current version of the
18 Alternative Capacity Price Rule is triggered when new capacity is needed, it does
19 not consider cleared Permanent De-List Bids in the trigger for the Alternative
20 Capacity Price Rule. Permanent De-List Bids clearing in the Forward Capacity
21 Auction should be considered, however, because they increase the need for new
22 capacity in the area. However, currently the calculation of “New Capacity
23 Required” takes place prior to the Forward Capacity Auction and so cannot

1 include the quantity of cleared Permanent De-List Bids, which can only be known
2 after the Forward Capacity Auction. This understates the need for new capacity
3 by failing to account for Permanent De-List Bids, which could result in the
4 existing Alternative Capacity Price Rule not being triggered when it should be.
5 To rectify this problem, APR-1 adds the quantity of Permanent De-List Bids
6 clearing in the Forward Capacity Auction to the quantity of New Capacity
7 Required, and if the sum of those values is greater than zero, APR-1 can be
8 triggered (if the other trigger conditions are also met).

9

10 **Q: HOW AND WHY ARE NON-PRICE RETIREMENT REQUESTS AND**
11 **DE-LIST BIDS REJECTED FOR RELIABILITY REASONS TAKEN**
12 **INTO ACCOUNT IN THE ALTERNATIVE CAPACITY PRICE RULE?**

13 **A.** Pursuant to the Rule Changes, the definition of Out-of-Market Capacity in APR-1
14 is expanded to include Permanent De-List Bids and Non-Price Retirement
15 Requests which affect the need for new capacity under APR-1, that have been
16 rejected for reliability reasons. This is because where a Non-Price Retirement
17 Request or a Permanent De-List Bid is rejected for reliability reasons, it has the
18 same effect on the Forward Capacity Auction clearing price as other Out-of-
19 Market Capacity. Once the bid is rejected for reliability reasons, the resource is
20 retained in the auction at a price below its costs. This issue was previously
21 identified in stakeholder deliberations, and a commitment to address the issue was
22 included in Section III.13.2.5.2.5(f) of the Tariff. Rejected one-year de-list bids
23 are addressed under APR-3, below.

1 **Q: WHAT IS THE BASIS FOR THE PRICING PROVISIONS IN THE FIRST**
2 **ALTERNATIVE CAPACITY PRICE RULE?**

3 **A.** The pricing provisions under APR-1 are unchanged from the current Alternative
4 Capacity Price Rule. That is, if APR-1 is triggered the Forward Capacity Auction
5 price is set to the lower of: (1) the price at which the last new resource left the
6 Forward Capacity Auction, minus \$0.01, or (2) CONE. This pricing is designed
7 to set an administrative price that reflects a competitive offer from a new resource
8 when a new resource is otherwise prevented from setting the price by the presence
9 of OOM resources.

10
11 **Q: WHY DOES THE ISO SUPPORT ESTABLISHING THE SECOND**
12 **ALTERNATIVE CAPACITY PRICE RULE UNDER SECTION**
13 **III.13.2.7.8.2 OF THE TARIFF?**

14 **A.** The current version of the Alternative Capacity Price Rule can only be triggered
15 when new capacity is required in the current Forward Capacity Auction. This
16 construct ignores the possibility that new capacity is not needed because a
17 sufficiently large amount of OOM resources cleared in prior FCAs. That is, new
18 capacity would have been needed but for the OOM resources that cleared in prior
19 FCAs. Thus, APR-2 provides for administrative pricing in situations where OOM
20 capacity in previous FCAs eliminates the need for new capacity, and hence might
21 inappropriately depress the price, in a subsequent Forward Capacity Auction.

1 **Q: WHAT IS CARRIED FORWARD EXCESS CAPACITY, AND WHY IS IT**
2 **TAKEN INTO ACCOUNT IN THE SECOND ALTERNATIVE CAPACITY**
3 **PRICE RULE?**

4 **A.** Consistent with the rationale provided above, Carried Forward Excess Capacity is
5 a new term introduced for use in determining whether APR-2 is triggered.

6 Carried Forward Excess Capacity includes two components. The first element
7 comprising Carried Forward Excess Capacity is Carried Forward Excess Out-of-
8 Market Capacity. The second element comprising Carried Forward Excess
9 Capacity is capacity carried forward due to rationing. These are described below.

10

11 **Q: WHAT IS CARRIED FORWARD EXCESS OUT-OF-MARKET**
12 **CAPACITY?**

13 **A.** Carried Forward Excess Out-of-Market Capacity is a tally of the OOM resources
14 that cleared in prior FCAs. This tally increases by the amount by which new
15 cleared OOM megawatts exceed the need for new resources, when the need for
16 new resources is positive, or the amount of new cleared OOM megawatts when
17 the need for new resources is negative. The carried forward excess decreases by
18 the increase in need for capacity each year, inclusive of Non-Priced Retirement
19 Requests and cleared Permanent De-List Bids.

20

21 These adjustments are appropriate because they decrease the tally as the need for
22 capacity grows, effectively eroding the Carried Forward Excess Out-of-Market
23 Capacity, and increase the tally with the addition of new OOM resources. If the

1 need for capacity grows faster than new OOM resources clear in the Forward
2 Capacity Auction, then the Carried Forward Excess Out-of-Market Capacity
3 decreases. If the need for capacity grows more slowly than the rate at which new
4 OOM resources clear in the Forward Capacity Auction, then the Carried Forward
5 Excess Out-of-Market Capacity increases.

6

7 **Q: WHY DOES SECTION III.13.2.7.8.2 PROVIDE THAT PAST EXCESS**
8 **OOM CAPACITY SHALL NOT CARRY FORWARD FOR MORE THAN**
9 **SIX YEARS, SUCH THAT IT WILL APPLY IN NO MORE THAN SEVEN**
10 **FCAS?**

11 **A.** The six year carry-forward limit reflects a concern that, should load growth be
12 zero or negative over an extended period of time, setting an administrative new
13 entry price based on out-of-market activity far in the past would not provide a
14 useful or accurate price signal to potential entrants in the capacity market. Similar
15 limits on the application of out-of-market remedies are in place in the NYISO
16 capacity market.¹ The seven auction limit was derived from calculating the length
17 of time, based on projected load growth in New England, that it would take for
18 the total quantity of OOM resources from the first three Forward Capacity
19 Auctions to be exceeded by load growth.² While the ISO evaluated calculating a

¹ The New York Independent System Operator Market Administration and Control Area Services Tariff, Sections 5.12.1, 5.12.2.

² The new OOM that cleared in the first three FCAs was 40 MW in the first FCA, 1,270 MW in the second FCA, and 695 MW in the third FCA, based on the Internal Market Monitor Report, Table 4-5, and subsequent communication with Internal Market Monitor staff. Average projected Installed Capacity Requirement growth from the 2010/2011 Power Year through the 2018/2019 Power Year was approximately 290 MW per year, based on Table 4-2 in RSP 09. It would take

1 year-specific limit after each Forward Capacity Auction as is done under the
2 NYISO rules, it believes that the added implementation complexity and
3 associated difficulties for auction participants would outweigh the benefits of a
4 year-specific calculation, and that seven years should generally be sufficient to
5 allow OOM carry-forward to be naturally eroded. Implanting a year-specific limit
6 would be more complex than in NYISO because of the different ways in which
7 the Alternative Capacity Price Rule is triggered in the two markets. Instead, the
8 Rule Changes include a limit applicable to all years that balances clarity and
9 simplicity with ensuring that the Alternative Capacity Price Rule is triggered
10 when appropriate.

11

12 **Q: WHY IS CAPACITY CARRIED FORWARD DUE TO RATIONING**
13 **TAKEN INTO ACCOUNT IN THE SECOND ALTERNATIVE CAPACITY**
14 **PRICE RULE?**

15 **A.** The second element of Carried Forward Excess Capacity is capacity carried
16 forward due to rationing. The current Forward Capacity Market rules already
17 recognize (at Section III.13.2.7.9) that where excess capacity is procured in a
18 Forward Capacity Auction as a result of the rationing rules, it could impact
19 pricing in a subsequent FCA. The Rule Changes eliminate Section III.13.2.7.9
20 but retain this concept by incorporating such excess capacity into the quantity of
21 Carried Forward Excess Capacity, and hence into the determination of whether
22 APR-2 is triggered. The Rule Changes delete the old capacity carry-forward rule

seven years at the projected Installed Capacity Requirement growth rate to fully utilize the OOM megawatts that cleared in the first three FCAs.

1 (Section III.13.2.7.9). Because a more comprehensive carry-forward rule has
2 been developed, it makes sense to fold the one existing carry-forward provision
3 into the more general carry-forward rules.
4

5 **Q: WHAT IS THE BASIS FOR THE PRICING PROVISIONS IN THE**
6 **SECOND ALTERNATIVE CAPACITY PRICE RULE?**

7 **A.** The pricing provisions for APR-2 are the same as for APR-1 (and are unchanged
8 from the currently-effective Alternative Capacity Price Rule). That is, if APR-2 is
9 triggered, the Forward Capacity Auction price is set to the lower of: (1) the price
10 at which the last new resource left the FCA, minus \$0.01, or (2) CONE.
11

12 **Q: PLEASE DISCUSS WHY THE ISO PROPOSED THE THIRD**
13 **ALTERNATIVE CAPACITY PRICE RULE UNDER SECTION**
14 **III.13.2.7.8.3 OF THE TARIFF.**

15 **A.** As discussed in the context of APR-1, this change arose from the commitment in
16 Section III.13.2.5.2.5(f) of the Tariff to evaluate whether de-list bids rejected for
17 reliability reasons should be considered for purposes of the application of the
18 Alternative Capacity Price Rule.³ APR-1 is triggered when new capacity is
19 required in the current Forward Capacity Auction, but an appropriate new entry
20 price is not set because of current period OOM resources. APR-2 is triggered

³ Section III.13.2.5.2.5(f) required that a filing be made with the Commission by May 17, 2010. See *ISO New England Inc. and New England Power Pool, Limited Revision to FCM Rules to Extend Date for Filing Regarding Treatment of De-List Bids Rejected for Reliability Reasons*, Docket No. ER08-952-000 (filed May 14, 2008); Letter Order re: Limited Revision to FCM Rules, Docket No. ER08-952-000 (June 10, 2008).

1 when new capacity is not needed, but only because a sufficiently large amount of
2 Carried Forward Excess Capacity exists. In each case, the price is
3 administratively set to a price that is intended to reflect a competitive offer from a
4 new entrant. Neither addresses the circumstance where new entry is not needed,
5 even when accounting for Carried Forward Excess Capacity, and therefore a de-
6 list bid from an existing resource should generally be expected to set the Forward
7 Capacity Auction price, but the price is depressed by de-list bids that are rejected
8 for reliability circumstances and retained in the FCA below their de-list bid price.
9 APR-3 is designed to address this situation.

10

11 **Q: WHY IS THE THIRD ALTERNATIVE CAPACITY PRICE RULE**
12 **TRIGGERED ONLY FOR FORWARD CAPACITY AUCTIONS THAT**
13 **ARE NOT SUBJECT TO A FLOOR PRICE?**

14 **A.** APR-3 can be triggered only after the expiration of the floor price because the
15 floor price level is equal to the highest price at which APR-3 could be triggered.
16 The floor prevents the auction price from descending to the price range in which
17 APR-3 applies.

18

19 **Q: PLEASE DESCRIBE THE NEW PRICING MECHANISM THAT IS**
20 **APPLIED WHEN THE THIRD ALTERNATIVE CAPACITY PRICE**
21 **RULE IS TRIGGERED.**

22 **A.** The APR-3 pricing mechanism removes rejected de-list bids from the supply
23 stack for the purpose of determining the Forward Capacity Auction clearing price.

1 It does this by adjusting the excess capacity downward by the total megawatts of
2 rejected de-list bids. This sets the Forward Capacity Auction price at the level
3 that would have prevailed had the de-list bids not been rejected, though this is
4 limited to prices below 0.6 times CONE for reasons discussed below.

5
6 However, at this price there is excess supply in the Forward Capacity Auction
7 equal to the total megawatts of rejected de-list bids. To address this excess
8 supply, a constant consumer cost demand curve is applied starting at that price
9 level. The demand curve is applied during the Forward Capacity Auction. The
10 Forward Capacity Auction is continued with the demand curve until supply equals
11 demand as determined by the intersection of the APR-3 demand curve and the
12 total supply in the Forward Capacity Auction including rejected de-list bids. The
13 demand curve ensures that consumers pay what they would have paid had the de-
14 list bids not been rejected; that the price does not fall dramatically due to rejected
15 de-list bids; and that all resources remaining in the Forward Capacity Auction are
16 willing to provide capacity at the prevailing price. The demand curve is triggered
17 when the Forward Capacity Auction price falls below 0.6 times CONE and when
18 the megawatts of rejected de-list bids equals or exceeds the excess supply in the
19 Forward Capacity Auction. All rejected de-list bids are included in this
20 calculation, not just those below 0.6 times CONE.

1 **Q: PLEASE DESCRIBE WHY THE NEW PRICING MECHANISM THAT IS**
2 **APPLIED WHEN THE THIRD ALTERNATIVE CAPACITY PRICE**
3 **RULE IS TRIGGERED APPLIES ONLY AT PRICES BELOW 0.6 TIMES**
4 **CONE.**

5 **A.** In the absence of market power concerns, the APR-3 pricing mechanism could be
6 applied at any price level where the megawatts of rejected de-list bids equals or
7 exceeds the excess supply in the Forward Capacity Auction. However, the ISO
8 developed these rules to be consistent with the concerns expressed in the Internal
9 Market Monitor Report on the first two FCAs.

10

11 Specifically, the Internal Market Monitor Report evidenced concern about relying
12 solely on the Internal Market Monitor's review of de-list bids to detect and
13 prevent the exercise of market power. This is reflected in the Internal Market
14 Monitor Report's recommendation that only Permanent De-List Bids, which have
15 inherent characteristics that make them unattractive as a means to exercise market
16 power, be allowed to create zones in the Forward Capacity Auction. The 0.6
17 times CONE price level is designed to protect against the exercise of market
18 power by allowing APR-3 to be triggered only at price levels that are likely to be
19 reflective of true going-forward costs (the Static De-List Bid standard in the
20 market rules) and not attempts to influence the market clearing price.

21

22 Market power is an important concern under APR-3 because APR-3 substantially
23 increases the potential rewards for submitting a de-list bid for resources that may

1 be rejected for reliability. By increasing the attractiveness of de-listing for these
2 resources, it is more likely that a resource will try to de-list uneconomically with
3 the intention of raising the Forward Capacity Auction clearing price.

4
5 First, there are already strong incentives for resources that are certain they are
6 needed for reliability to de-list at the highest possible price. Such a resource
7 owner can receive the higher of the de-list bid price and the market clearing price.
8 This issue is managed by Internal Market Monitor review and approval of de-list
9 bids. To the extent that a resource owner is less than certain that a resource is
10 needed for reliability, it faces the risk that the resource is not needed for
11 reliability, that it is allowed to de-list, and that it will not receive any capacity
12 payment. This reduces the incentive to submit otherwise uneconomic de-list bids.
13 The greater the uncertainty, the greater the disincentive to seek a greater-than-
14 market reliability payment.

15
16 However, because APR-3 creates the potential to both get paid at above-market
17 rates and to simultaneously affect clearing prices through the withholding of
18 resources, it makes de-list bids much more attractive than without APR-3. That
19 is, a resource that is retained for reliability both gets an above-market payment
20 and is able to withhold its capacity from the market, possibly raising the market
21 clearing price paid to its other resources. The latter benefit is created by the
22 adoption of APR-3 and is the source of the new market power concerns. For this

1 reason, prohibiting the application of APR-3 at price levels where de-list bids are
2 uncommon is appropriate.

3
4 The 0.6 times CONE level is based on experience with de-list bids in the first
5 three FCAs. Experience shows that large quantities of one-year de-list bids have
6 not been submitted above 0.6 times CONE, despite the fact that some of these de-
7 list bids need not undergo market monitor review, making the 0.6 times CONE
8 threshold unlikely to be a restriction in triggering APR-3. Moreover, there have
9 been relatively few megawatts of rejected de-lists in the first three FCAs.⁴ In
10 none of these FCAs would the megawatts of rejected de-list bids have equaled or
11 exceeded the excess supply in the Forward Capacity Auction at prices at or above
12 0.6 times CONE. The limit provides protection against an increase in de-list bids
13 above 0.6 times CONE due to the increased incentives to submit such de-list bids.
14 Based on this experience, it is reasonable to project that there will be little or no
15 harm in not applying APR-3 at price levels above 0.6 times CONE (that is, it is

⁴ The megawatts of rejected de-list bids in each of the first three FCAs were: first FCA: two Dynamic De-List Bids were rejected (Norwalk Harbor 1 (162 MW) & Norwalk Harbor 2 (168 MW) for a total of 330 MW, however, in May 2009 after further review and pursuant to Section m.13.2.5.2.5, the ISO agreed to allow Norwalk Harbor 2 to de-list); second FCA: no de-list bids were rejected (0 MW); third FCA: two Static De-List Bids were rejected (Salem Harbor 3 (150 MW) & Salem Harbor 4 (431 MW) for a total of 581 MW).

The first three Forward Capacity Auctions presented the following megawatt values of excess capacity at 0.6 CONE (the auction closing price) at the end of each round: first Forward Capacity Auction excess = 1,772 MW; second Forward Capacity Auction excess = 4,755 MW; third Forward Capacity Auction excess = 5,030 MW. These excess capacity values reflect the total cleared capacity minus the net Installed Capacity Requirement, capped by the Real Time Emergency Generation (“RTEG”) limit of 600 MW, pursuant to Section III.13.2.3.3(f) of the Tariff. *See* Forward Capacity Auction Results Filing, Docket No. ER08-633-000 (filed March 3, 2008); Forward Capacity Auction Results Filing, Docket No. ER09-467-000 (filed December 23, 2008); Forward Capacity Auction Results Filing, Docket No. ER10-186-000 (filed October 30, 2009).

1 unlikely that because of the 0.6 times CONE restriction, APR-3 will not be
2 triggered when it should be). However, the 0.6 times CONE level should be
3 revisited after further experience is gained.

4

5 **Q: PLEASE DESCRIBE WHY, UNDER THE RULE CHANGES IN SECTION**
6 **III.13.2.7.8, IN NO CASE WILL THE APPLICATION OF ANY OF THE**
7 **THREE ALTERNATIVE PRICE MECHANISMS RESULT IN**
8 **LOWERING THE CAPACITY CLEARING PRICE THAT OTHERWISE**
9 **RESULTS FROM THE FORWARD CAPACITY AUCTION.**

10 **A.** The revised rules contain a provision stating that in no case will the application of
11 any of the three Alternative Capacity Price Rules result in lowering the capacity
12 price in the Forward Capacity Auction. This is included because the Alternative
13 Capacity Price Rule was designed to address circumstances when the capacity
14 price was artificially depressed by OOM capacity. Further decreasing the price
15 would not be appropriate. An explicit provision stating that the Alternative
16 Capacity Price Rules cannot lower the clearing price is necessary, however,
17 because there are certain unlikely and unusual circumstances under which the
18 Alternative Capacity Price Rule rules might strictly require that the capacity price
19 be lowered. This could occur, for example, if CONE were relatively low, the
20 auction naturally cleared above CONE, and APR-1 was triggered. In that
21 circumstance, the lower of the last new resource to leave the Forward Capacity
22 Auction and CONE would be CONE, which would also be lower than the
23 unadjusted Forward Capacity Auction clearing price.

1 **B. EXTENSION OF FLOOR PRICE**

2

3 **Q: WHY DOES THE ISO SUPPORT THE RULE CHANGES CONCERNING**
4 **THE CAPACITY CLEARING PRICE FLOOR UNDER SECTION**
5 **III.13.2.7.3 OF THE TARIFF?**

6 **A.** Section III.13.2.7.3 of the Forward Capacity Market rules provides for a
7 “Capacity Clearing Price Collar” with a price floor of 0.6 times CONE and a price
8 ceiling of 1.4 times CONE to be effective for the first three successful Forward
9 Capacity Auctions. The Rule Changes extend the current price floor as a way to
10 address the OOM resources that cleared in the first three Forward Capacity
11 Auctions. These resources have contributed to the excess capacity in New
12 England going into the fourth Forward Capacity Auction, and therefore have had
13 a downward effect on expected future prices.

14

15 However, it is not clear that it would be appropriate to account for such capacity
16 using the new carried-forward excess OOM capacity mechanism described above.
17 This is for two reasons. First, if the carry-forward rules had been in effect,
18 resources that did not sufficiently support their offers below 0.75 times CONE in
19 the first three Forward Capacity Auctions may have been motivated to provide
20 additional data to support their offers and thereby may have not been considered
21 OOM in the first instance. Second, it is generally prudent to only apply rule
22 changes on a prospective basis to minimize market uncertainty.

1 An extension of the floor price is a reasonable compromise which balances an
2 appropriate desire to address the effect of past OOM activity, while recognizing
3 that the OOM entry was treated appropriately by the rules in effect at that time.
4

5 **Q: WHY WILL THIS CHANGE APPLY ONLY FOR THE FORWARD**
6 **CAPACITY AUCTIONS ASSOCIATED WITH THE CAPACITY**
7 **COMMITMENT PERIODS BEGINNING ON JUNE 1, 2013, JUNE 1, 2014,**
8 **AND JUNE 1, 2015?**

9 **A.** This change will apply only to the next three auctions because an extension of that
10 length strikes a reasonable balance between adjusting for past OOM resources and
11 recognizing that past OOM resources had entered under rules which had no carry
12 forward provisions.
13

14 **C. COMPENSATION WHERE PRORATIONING IS REJECTED FOR**
15 **RELIABILITY REASONS**
16

17 **Q: WHY DOES THE FILING PROPOSE TO CHANGE THE RULES**
18 **CONCERNING THE MEGAWATT PRORATIONING ELECTION**
19 **UNDER SECTION III.13.2.7.3(b) OF THE TARIFF?**

20 **A.** This Rule Change clarifies the rules by specifically providing that megawatts that
21 are not permitted to prorate because they are deemed necessary for reliability will
22 be compensated at a price level equal to that received by the other resources
23 providing capacity, as explained further below. In making this change, the Rule

1 Change eliminates, on a prospective basis, a continuing source of concern to
2 generators that resources denied megawatt prorationing on the basis of reliability
3 are treated unfairly.⁵

4
5 The current rule does not provide for additional compensation when a resource is
6 denied megawatt prorationing and the result is that resources retained for
7 reliability are compensated at a rate below the rate that other resources in the
8 Capacity Zone receive. This approach was revisited with the extension of the
9 price floor, and after experience with the reliability evaluations of pro-rationing
10 requests it was determined that it was appropriate to pay such resources the
11 clearing price for all obligated megawatts during the floor price extension. Thus,
12 in this case, it is reasonable to compensate megawatts that are deemed necessary
13 for reliability at a rate equal to that received by the other resources providing
14 capacity.

⁵ See e.g., *Motion to Intervene and Comments of Exelon Corporation*, Docket No. ER10-186-000 at p. 4 (filed Dec. 14, 2009).

1 **D. FORWARD CAPACITY AUCTION STARTING PRICE DE-**
2 **COUPLED FROM CONE**

3
4 **Q: PLEASE EXPLAIN WHY THE FORWARD CAPACITY AUCTION**
5 **STARTING PRICE IS DECOUPLED FROM THE COST OF NEW ENTRY**
6 **(“CONE”) UNDER SECTION III.13.2.4(a) OF THE TARIFF.**

7 **A.** The Internal Market Monitor Report recommended that the starting price be
8 raised and set independently of CONE to ensure that generation, imports, and
9 demand resources would each be incented to participate and ensure a competitive
10 auction. The concern was that the Forward Capacity Auction starting price,
11 currently indexed to CONE, would not be sufficiently high to induce robust
12 participation. At the extreme, there was concern that there would not be enough
13 resources at the Forward Capacity Auction starting price to meet the regional
14 Installed Capacity Requirement. Economic theory suggests that a high auction
15 starting price has no negative pricing effects and should not introduce increased
16 risk of the exercise of market power. Because there are risks from too low a
17 starting price and no dangers from beginning a competitive auction at too high a
18 price, the Internal Market Monitor recommended, and the ISO supported, an
19 increase in the Forward Capacity Auction starting price and a decoupling of the
20 price from CONE.

1 **Q: WHY IS THE CONE APPLICABLE TO EACH CAPACITY ZONE**
2 **BEGINNING ON JUNE 1, 2013 SET AT \$4.918/KW-MONTH?**

3 **A.** The revised rules clarify that the CONE for the fourth Forward Capacity Auction
4 is \$4.918/kW-mo, the same as that used in the third Forward Capacity Auction,
5 and that the first application of the Handy-Whitman Index would not occur until
6 after the fourth Forward Capacity Auction. The CONE of \$4.918/kW-mo for the
7 fourth Forward Capacity Auction is exactly the CONE that is generated under the
8 current Market Rule. CONE is not updated after the third Forward Capacity
9 Auction under the Market Rule because there was no new capacity required in the
10 third Forward Capacity Auction. The specific value was added to the Market
11 Rule for clarity.

12
13 **Q: WHY WILL THE CONE BE ADJUSTED USING A ROLLING THREE-**
14 **YEAR AVERAGE OF PUBLIC UTILITY CONSTRUCTION COSTS**
15 **WHEN THE PRICE IS SET PURSUANT TO THE CAPACITY**
16 **CLEARING PRICE FLOOR DESCRIBED IN SECTION III.13.2.7.3 OR**
17 **PURSUANT TO ONE OF THE ALTERNATIVE CAPACITY PRICE**
18 **RULES DESCRIBED IN SECTION III.13.2.7.8?**

19 **A.** CONE was designed to be updated annually by incorporating the Forward
20 Capacity Auction clearing price determined by new capacity. When new capacity
21 is not needed, CONE is maintained at the level from the previous auction. The
22 CONE rules do not provide for the updating of CONE during long periods
23 without an auction price set by new entry, and this situation was likely not

1 contemplated when the rules were developed. Under such conditions, CONE can
2 become “stale” and not reflect general changes in construction costs or price
3 levels due to inflation or deflation. To address this issue, the proposed rules
4 update CONE when CONE is not otherwise updated under the rules, including
5 where the price is set pursuant to the capacity clearing price floor or pursuant to
6 one of the Alternative Capacity Price Rules. This change was suggested in the
7 Internal Market Monitor Report.

8

9 **Q: WHY ARE THE RULE CHANGES UNDER SECTIONS III.13.1.2.2.5.2,**
10 **III.13.1.2.3.1.3, III.13.1.2.3.2.1.2, III.13.1.2.3.2.4, AND III.13.1.4.8.1 OF THE**
11 **TARIFF BEING PROPOSED.**

12 **A.** Because with the Rule Changes the Forward Capacity Auction Starting Price is no
13 longer synonymous with 2.0 times CONE, it was necessary to change references
14 from 2.0 times CONE to the starting price (or vice versa) in a number of
15 instances. These changes can be found at Sections III.13.1.2.2.5.2,
16 III.13.1.2.3.1.3, III.13.1.2.3.2.1.2, III.13.1.2.3.2.4, and III.13.1.4.8.1.

1 **E. ALLOWING FOR ADDITIONAL MODELING OF CAPACITY**
2 **ZONES DURING THE FORWARD CAPACITY AUCTION AND**
3 **THE PIVOTAL SUPPLIER TEST**

4

5 **Q: THE RULE CHANGES PROVIDE FOR IMPROVED MODELING OF**
6 **CAPACITY ZONES BEFORE AND DURING THE FORWARD**
7 **CAPACITY AUCTION. HOW ARE ZONES CURRENTLY MODELED**
8 **UNDER THE MARKET RULES?**

9 **A.** As explained further in Mr. Karl’s testimony, the current practice is to rely on the
10 existing energy market Load Zones as the starting point for modeling potential
11 Capacity Zones in the Forward Capacity Auction.⁶ Prior to each Forward
12 Capacity Auction, the ISO calculates the capacity requirements and limitations of
13 each Load Zone in accordance with Section III.12.2 of the Tariff. Based on these
14 requirements and limitations, the final Capacity Zones to be modeled in the
15 Forward Capacity Auction are then determined in accordance with Section
16 III.12.4 of the Tariff.

17

18 Under the current tariff provisions, import-constrained Capacity Zones are
19 defined before each auction only if the total amount of existing capacity within a
20 particular zone is less than its Local Sourcing Requirement (sometimes referred to
21 herein as “LSR”). Therefore, when the capacity in a modeled Capacity Zone
22 exceeds the Local Sourcing Requirement *prior to the auction*, that Capacity Zone

⁶ Testimony of Mark G. Karl at pp. 3-4.

1 is not used in the auction. Stated differently, when the capacity in a modeled
2 Capacity Zone exceeds the Local Sourcing Requirement, the current Forward
3 Capacity Auction rules do not provide a means to form a Capacity Zone and
4 determine a zonal price if resources within the modeled Capacity Zone de-list
5 *during* the auction.

6

7 **Q: HOW DO THE RULE CHANGES IMPROVE THE ZONAL PRICING**
8 **MECHANICS DURING THE FORWARD CAPACITY AUCTION?**

9 **A.** Under the Rule Changes, Non-Price Retirement Requests, Permanent De-List
10 Bids, Static De-List Bids from non-pivotal suppliers, Export Bids from non-
11 pivotal suppliers, and Administrative Export De-List Bids from non-pivotal
12 suppliers are considered in the formation of a Capacity Zone from an import-
13 constrained Load Zone in the instant Forward Capacity Auction. Under the
14 current rules these are not considered.

15

16 **Q: PLEASE DESCRIBE THE RULE CHANGES IN THIS REGARD.**

17 **A.** As noted above, under the current tariff provisions, import-constrained Capacity
18 Zones are modeled *before* each auction only if the total amount of existing
19 capacity within a particular zone is less than its Local Sourcing Requirement.
20 Pursuant to the Rule Changes, Non-Price Retirement Requests, Permanent De-
21 List Bids, Static De-List Bids from non-pivotal suppliers, Export Bids from non-
22 pivotal suppliers, and Administrative Export De-List Bids from non-pivotal
23 suppliers will be considered in the modeling and formation of an import-

1 constrained Capacity Zone from an import-constrained Load Zone in the instant
2 Forward Capacity Auction.

3
4 Specifically, the megawatts associated with these bids will be *excluded from* the
5 projection of the quantity of existing capacity in a modeled Capacity Zone. This
6 will lower the amount of projected capacity in a potentially modeled Capacity
7 Zone and will tend to support the creation of Capacity Zones when compared to
8 the existing tariff provisions.

9
10 Whether a zone will actually be created will depend on participant behavior in the
11 Forward Capacity Auction. For example, the system-wide capacity requirement
12 might bind prior to a Zone's Local Sourcing Requirement, in which case a
13 separately priced import-constrained zone would not be created.

14
15 From the perspective of a Forward Capacity Auction participant, the revised rules
16 would work as follows: All bids except Dynamic De-List Bids are submitted
17 prior to the Forward Capacity Auction. Based on those bids, the existing capacity
18 in a zone, and the zone's capacity requirement, it can be determined if a separate
19 import-constrained zone might form during the Forward Capacity Auction. For it
20 to be possible for a separate import-constrained zone to form the submitted Non-
21 Price Retirement Requests, Permanent De-List Bids, Static De-List Bids from
22 non-pivotal suppliers, Export Bids from non-pivotal suppliers, and Administrative
23 Export De-List Bids from non-pivotal suppliers must exceed the *excess* existing
24 capacity in the zone (*i.e.*, must be greater than the difference between the

1 projected existing supply for that Capacity Commitment Period and the local
2 capacity requirement). If the total megawatt amount of these de-list bids is
3 greater than the excess capacity in a zone, then the zone might experience price
4 separation in the Forward Capacity Auction. Whether the zone is separately
5 priced in the Forward Capacity Auction will depend on whether the system-wide
6 closing conditions are met before sufficient capacity withdraws from the modeled
7 import-constrained zone.

8

9 **Q: WHY DOES THE ISO PROPOSE TO ALLOW NON-PRICE**
10 **RETIREMENT REQUESTS, PERMANENT DE-LIST BIDS, STATIC DE-**
11 **LIST BIDS FROM NON-PIVOTAL SUPPLIERS, EXPORT BIDS FROM**
12 **NON-PIVOTAL SUPPLIERS, AND ADMINISTRATIVE EXPORT DE-**
13 **LIST BIDS FROM NON-PIVOTAL SUPPLIERS TO BE CONSIDERED IN**
14 **THE FORMATION OF A CAPACITY ZONE?**

15 **A.** The Internal Market Monitor Report included a recommendation to allow
16 Permanent De-List Bids to affect the creation and pricing of zones in the Forward
17 Capacity Auction to improve zonal price formation. Permanent De-List Bids,
18 once cleared, prevent a resource from participating in any future Forward
19 Capacity Auction. According to the Internal Market Monitor Report, this makes
20 attempting to exercise market power using these bids costly. Therefore,
21 Permanent De-List Bids are likely to be competitive. Accordingly, the Rule
22 Changes allow Permanent De-List Bids to be considered in the formation of a
23 Capacity Zone. Non-Price Retirement Requests, once accepted require a resource

1 to shut down permanently. This is an even more costly consequence than a
2 Permanent De-List Bid. Therefore, Non-Price Retirement Requests are likely to
3 be competitive rather than an attempt to exercise market power and should be
4 considered in the formation of a Capacity Zone.

5 Static De-List Bids from non-pivotal suppliers, Export Bids from non-pivotal
6 suppliers, and Administrative Export De-List Bids from non-pivotal suppliers will
7 also be considered in modeling import constrained Capacity Zones pursuant to the
8 Rule Changes. Although not identified in the Internal Market Monitor Report,
9 they are included here because the ISO will impose a Pivotal Supplier test that
10 will ensure that such bids are also likely to be competitive (*i.e.*, represent the
11 resource's going forward cost) rather than an attempt to exercise market power.
12 This is because those bids will only be allowed to affect the formation of a
13 Capacity Zone if they pass the Pivotal Supplier test for market power. The
14 Pivotal Supplier test acts as a safeguard against the exercise of market power by
15 identifying which suppliers are non-pivotal and therefore likely to offer
16 competitively.

17
18 Limiting the bids that are allowed to affect the formation of Capacity Zones in
19 this way respects the market power concerns identified in the Internal Market
20 Monitor Report while improving the locational price signals in the Forward
21 Capacity Auction.

1 **Q: PLEASE DESCRIBE HOW THE RULE CHANGES IMPROVE PRICE**
2 **FORMATION IN THE FORWARD CAPACITY AUCTION.**

3 **A.** Under the revised rules, a modeled zone can experience price separation when the
4 amount of Non-Price Retirement Requests, Permanent De-List Bids, Static De-
5 List Bids from non-pivotal suppliers, Export Bids from non-pivotal suppliers, and
6 Administrative Export De-List Bids from non-pivotal suppliers exceeds the
7 excess existing capacity in the zone. This cannot occur at a price level above that
8 of the de-list bid which completely erodes the existing excess capacity. Because
9 these bids are known in advance, the price level at or below which a zone might
10 be created can also be known in advance.

11

12 If there are no new resources in the zone, then the closing conditions for the zone
13 will be met at that price level and the clock for that zone will stop and establish
14 the zonal clearing price (excepting the provisions concerning “lumpy” resources
15 and minimizing consumer costs and assuming that the system-wide closing
16 conditions were not met). If there are remaining new resources in the zone, then
17 the price in the zone will continue to fall until some combination of new and
18 existing resources exit the auction and trigger the closing conditions in the zone,
19 or until the system-wide closing conditions are met. Once a sufficient number of
20 Non-Price Retirement Requests, Permanent De-List Bids, Static De-List Bids
21 from non-pivotal suppliers, Export Bids from non-pivotal suppliers, and
22 Administrative Export De-List Bids from non-pivotal suppliers have cleared in

1 the Forward Capacity Auction, any bid or offer in the zone can trigger the closing
2 conditions in the zone and set price, subject to the lumpiness provisions.
3 For example, if the potential modeled import constrained load zone has 200 MW
4 of excess installed capacity at the start of the auction, but there are Permanent De-
5 List Bids (and/or Static De-List Bids from non-pivotal suppliers) in that zone that
6 in total are more than 200 MW, the import constrained zone will be modeled
7 under Section III.12.4(b)(iii). During the auction an import constrained zone,
8 with a price higher than the price for the Rest-of-Pool zone, will emerge, per
9 Section III.13.2.3.3.(a)(2)(i), when the aggregate supply is less than or equal to
10 the zone's Local Sourcing Requirement. If one Permanent De-List Bid for 150
11 MW is submitted at \$9/kW-mo and one for 100 MW is submitted at \$7/kW-mo,
12 the zone would be created and priced in the auction at \$7/kW-mo, because
13 allowing the \$7/kW-mo resource to de-list would cause the zone to fail to meet its
14 local capacity requirement. If, however, 100 MW of new resources remained in
15 the zone at \$7/kW-mo, the price in the zone would continue to drop below
16 \$7/kW-mo until either 50 MW of additional resources in the zone withdraw from
17 the auction, or the system-wide closing conditions are met. The additional 50
18 MW to withdraw could be either new or existing capacity and it would not matter
19 if the existing capacity was from a Pivotal Supplier.

20

21 **Q: WHY ARE THESE CHANGES DESIRABLE?**

22 **A.** Ensuring that zones are created appropriately in the Forward Capacity Auction
23 enables the auction to set prices that reflect the locational value of capacity. This

1 is recognized in the Internal Market Monitor Report. This will improve the
2 efficiency of the wholesale electricity market by ensuring that the cost of
3 providing capacity in each zone is more fully reflected in capacity prices, sending
4 more accurate price signals that promote efficient decisions by potential new
5 entrants, and decisions by existing resources seeking to leave the market. Over
6 the long term, this will improve the reliability of the bulk power system by
7 incenting the right amount of capacity in the right locations. Accordingly, the
8 proper formation of zones is desirable and the Rule Changes are intended to
9 improve the chances that zones will be modeled when needed using the de-list
10 bids submitted in advance of the auction.

11

12 Without these changes, there are circumstances when a separate, zonal price will
13 not be determined, leading to insufficient or untimely investment in new resources
14 and excess or untimely de-listing of existing resources under certain conditions.
15 Ultimately, improved creation and pricing of import-constrained zones will
16 improve economic efficiency and help to ensure reliability.

17

18 **Q: PLEASE DESCRIBE THE PIVOTAL SUPPLIER TEST USED TO**
19 **DETERMINE WHETHER A STATIC DE-LIST BID CAN AFFECT**
20 **ZONAL CREATION AND PRICING?**

21 **A.** As explained in Mr. LaPlante’s testimony, the Pivotal Supplier test is used to
22 determine if Static De-List Bids from non-pivotal suppliers, Export Bids from

1 non-pivotal suppliers, and Administrative Export De-List Bids from non-pivotal
2 suppliers can safely be permitted to affect zonal creation and pricing.

3

4 **Q: WHAT IS A PIVOTAL SUPPLIER?**

5 **A.** To prevent Pivotal Suppliers from affecting zonal pricing and creation, the Rule
6 Changes include the new defined term “FCM Pivotal Supplier” and a test that
7 identifies such suppliers. In order to determine if a market participant in the FCM
8 is a “Pivotal Supplier” one looks at the total Qualified Capacity from the market
9 participant’s Existing Capacity Resources in the Capacity Zone and subtracts the
10 quantity of the market participant’s capacity subject to Non-Price Retirement
11 Requests. This net figure of the market participant’s total Qualified Capacity
12 Existing Capacity Resources in the Capacity Zone (“X”) is compared to a second
13 figure. The second figure (“Y”) is the difference between: (a) the total
14 megawatts from qualified Existing Capacity Resources in the Capacity Zone
15 minus (b) the sum of: (i) the quantity of capacity subject to Non-Price Retirement
16 Requests in that Capacity Zone plus, (ii) the Local Sourcing Requirement for the
17 Capacity Zone. If the market participant’s “X” (*i.e.*, its *net* total Qualified
18 Capacity Existing Capacity Resources in the Capacity Zone) is greater than “Y”
19 (*i.e.*, the total *net* megawatts from all qualified Existing Capacity Resources in the
20 Capacity zone), it is an “FCM Pivotal Supplier.”

1 **Q: DOES THE PIVOTAL SUPPLIER TEST ADEQUATELY PROTECT**
2 **AGAINST THE EXERCISE OF MARKET POWER IN THE CREATION**
3 **AND PRICING OF ZONES?**

4 **A.** Yes. As explained further in Mr. LaPlante’s testimony, in this circumstance the
5 Pivotal Supplier test, in conjunction with the Internal Market Monitor’s review of
6 the submitted bid, is sufficient.

7

8 **F. CLARIFICATION REGARDING THE OBLIGATIONS OF A**
9 **GENERATING RESOURCE WITH NO CAPACITY SUPPLY**
10 **OBLIGATION IN RESPONSE TO AN ISO REQUEST FOR**
11 **ENERGY IN THE REAL TIME ENERGY MARKET**

12

13 **Q: WHY IS THE ISO PROPOSING TO ADD LANGUAGE TO SECTION**
14 **III.13.6.4 OF THE TARIFF REGARDING ISO REQUESTS FOR ENERGY**
15 **IN THE REAL TIME ENERGY MARKET?**

16 **A.** Under existing Section III.13.6.2.1.1 (“Energy Market Offer Requirements”), a
17 Generating Capacity Resource having no Capacity Supply Obligation is not
18 required to offer into the Day-Ahead Energy Market or Real-Time Energy
19 Market.

20

21 Nonetheless, under existing Section III.13.6.4 of Market Rule 1, the ISO may:
22 “request that a Generating Capacity Resource having capacity that is not subject
23 to a Capacity Supply Obligation provide energy for reliability purposes in the

1 Real-Time Energy Market, but that resource is not obligated to provide energy
2 from that capacity, and will not incur availability penalties for failure to provide
3 energy.”

4
5 The proposed tariff language in Section III.13.6.4 clarifies that in response to a
6 request from the ISO, *under Section III.13 of Market Rule 1* a Generating
7 Capacity Resource is not obligated to provide energy and will not be subject to
8 any availability penalties for its capacity that is not subject to a Capacity Supply
9 Obligation. The clarifications make clear that this section does not absolve
10 resources of any other obligations that the resource might have to provide energy
11 under other sections of the Tariff or under other rules and regulations.

1 **Q: DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

2 **A.** Yes.

3

4

5

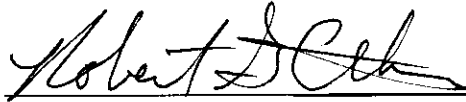
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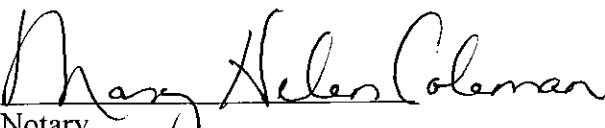
1 I declare under penalty of perjury that the foregoing is true and correct.

2
3 Executed on 2/18/2010
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9 Robert G. Ethier, Ph.D.

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Sworn to before me, this 18th day of February, 2010


Notary

Mary Helen Coleman
Notary Public, District of Columbia
My Commission Expires 4/14/2012

ATTACHMENT 4

Testimony of Mark G. Karl

On behalf of the ISO

1 I presently have senior management responsibility for the Load Forecasting,
2 Resource Adequacy, Forward Capacity Market Tariff and Administration, and the
3 Forward Capacity Market Auction Groups at the ISO.¹ These groups have overall
4 responsibility for operating the Forward Capacity Market, performing the load
5 forecasting and planning studies to set the New England resource capacity and
6 Local Sourcing Requirements for that market, qualifying generation and demand
7 resources for participating in the market, performing economic and production
8 cost studies, and operating the New England transmission cost allocation process.
9 Prior to that I was Director of Market Development and Integration and Manager
10 of Market Design where I was extensively involved in the ongoing development
11 of the Resource Adequacy/Forward Capacity Market, the Forward Reserve
12 Market, and the Long Term Transmission Rights process, and was responsible for
13 development of the market rules and NEPOOL Manuals for the ISO Standard
14 Market Design.

15
16 Prior to joining the ISO, I worked at the Duquesne Light Company in Pittsburgh
17 in a number of areas including Fossil and Nuclear Generation Engineering and
18 Operations, Risk Assessment, Regulatory Analysis, Finance, Structured
19 Transactions and System Planning, as well as participating in a number of
20 unregulated electric market related ventures. At Duquesne, I had a total of five
21 years of experience specifically in planning, managing the Integrated Resource

¹ 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. Market Rule 1 is Section III of the ISO Tariff.

1 Planning Group, as well as load forecasting, tariff administration, and financial
2 and strategic planning groups. I had extensive involvement in the restructuring
3 and deregulation of the electric industry in Pennsylvania, including development
4 of retail choice pilot programs, asset valuation, stranded cost filings, and asset
5 divestiture.

6

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

8 **A.** The purpose of my testimony is to describe the Rule Changes addressing: (a) how
9 potential Capacity Zones are initially modeled for a Forward Capacity Auction
10 (“FCA”), and (b) the methodology for calculating the Local Sourcing
11 Requirement for an import-constrained zone.

12

13 **Q: WHAT IS A CAPACITY ZONE?**

14 **A.** A Capacity Zone is a geographic sub-region of the New England Control Area,
15 modeled in the FCA, as determined in accordance with Section III.12.4 of the
16 Tariff.

17

18 **Q: WHAT IS THE CURRENT PRACTICE FOR MODELING POTENTIAL
19 CAPACITY ZONES IN THE FCA?**

20 **A.** The current practice is to rely on the existing energy Load Zones as the starting
21 point for modeling potential Capacity Zones in the FCA. Prior to each FCA, the
22 ISO calculates the capacity requirements and limitations of each Load Zone in
23 accordance with section III.12.2 of the Tariff. Based on these requirements and

1 limitations, the final Capacity Zones to be modeled in the FCA are then
2 determined in accordance with section III.12.4 of the Tariff.

3

4 **Q: PLEASE DESCRIBE THE RULE CHANGES REGARDING THE**
5 **MODELING OF POTENTIAL CAPACITY ZONES IN THE FCA.**

6 **A.** The change pertains to the starting point for modeling potential Capacity Zones in
7 the FCA. While energy Load Zones will continue to be used as a starting point
8 for modeling potential Capacity Zones, in the event transmission limitations
9 develop such that intra-zonal constraints must be captured in the Forward
10 Capacity Market (“FCM”), the modeled Capacity Zones can also include
11 subdivisions of an energy Load Zone. Any such subdivision will respect the Load
12 Zone boundary and to the extent possible the state retail electric service
13 territories.

14

15 **Q: DESCRIBE THE OTHER TYPES OF ZONES OR ZONAL STRUCTURES**
16 **(OTHER THAN EXISTING ENERGY LOAD ZONES) THAT WERE**
17 **CONSIDERED FOR USE AS POTENTIAL CAPACITY ZONES IN THE**
18 **FCA?**

19 **A.** As part of an extensive stakeholder process that began in May 2009, the NEPOOL
20 Reliability Committee and the ISO together considered the benefits and
21 drawbacks of using other geographic delineations as potential Capacity Zones in
22 the FCA. The goal of this exercise was to identify as potential Capacity Zones,
23 geographic regions within which resources would have, from a strict reliability

1 prospective, a very high probability of substitutability. The stakeholders reviewed
2 the use of Reliability Regions, Load Zones, Reserve Zones, Dispatch Zones and
3 the concept of a “pure” capacity reliability zone as potential options. Note that a
4 “pure” capacity reliability zone would be defined as a zone developed without
5 regard to other market structures or other practical considerations and only
6 considering electric topology. Based on the extreme complexity of
7 implementation of some of these options, known auction and settlement software
8 limitations, and the clear benefits of using existing energy Load Zones, it was
9 decided that energy Load Zones and/or their subdivision(s) would be used as
10 potential Capacity Zones in the FCA. The work performed by the NEPOOL
11 Reliability Committee and the ISO was later integrated into the Forward Capacity
12 Market Working Group stakeholder process.

13

14 **Q: WHAT ARE THE BENEFITS OF USING ENERGY LOAD ZONES**
15 **AND/OR THEIR SUBDIVISIONS AS POTENTIAL CAPACITY ZONES**
16 **IN THE FCA?**

17 **A.** There are several benefits of using energy Load Zones and/or their subdivision as
18 potential Capacity Zones in the FCA. The use of energy Load Zones and/or their
19 subdivision: (a) avoids the creation of another zonal system in the ISO markets,
20 (b) conforms to existing ISO settlement systems and trading patterns, (c) means
21 that the zones would not cross state or utility boundaries, and (d) partially
22 coincides with the natural electrical boundaries that would be consistent with
23 “pure” capacity reliability zones.

1

2 **Q: HOW WILL THE “REST-OF-POOL” (“ROP”) CAPACITY ZONE BE**
3 **MODELED?**

4 **A.** The ROP zone configuration will result from the consolidation of adjacent Load
5 Zones that are neither export-constrained nor import-constrained. Prior to
6 establishing zonal capacity requirements, transmission interface transfer limits
7 must be calculated between each potential Capacity Zone and adjacent potential
8 Capacity Zones. In the event a discrete transmission interface transfer limit
9 cannot be determined, such as might happen where there are multiple
10 interconnections between zones or complex embedded constraints across or
11 within zones, the potential Capacity Zone with the indeterminate limit will be
12 consolidated into the modeled ROP Capacity Zone.

13

14 **Q: EXPLAIN HOW THIS IS DIFFERENT FROM THE WAY ROP IS**
15 **CURRENTLY MODELED?**

16 **A.** By using energy Load Zones and/or their subdivision as potential Capacity Zones
17 in the FCA, it is possible there will be increased granularity in the modeling of
18 Capacity Zones in the FCA. As a result, the modeled ROP Capacity Zone may be
19 smaller or configured differently than it is currently modeled. It is important to
20 note however, that these changes pertain to the reliability modeling of potential
21 capacity market zones. Having developed a set of potential zones and zonal
22 requirements in the reliability process, the configuration is then subjected to
23 testing to determine which of these zones will be modeled in the capacity market.

1 Changes to that market modeling process are discussed in the testimony of Dr.
2 Robert Ethier.

3

4 **Q: IN THE FUTURE HOW WILL THE ISO DETERMINE WHETHER A**
5 **CHANGE TO THE INITIALLY-MODELED CAPACITY ZONES IN THE**
6 **FCA IS NECESSARY?**

7 **A.** This determination will be made as part of the Regional System Plan process
8 where the ISO may review: (i) the impact of proposed transmission topology
9 changes on zonal configuration and requirements, (ii) the identification of
10 emerging issues which may require changes in zonal configuration, (iii) the
11 identification of effective solutions to local security or reliability needs, and (iv)
12 projections of zonal configurations under alternate expansion strategies.

13

14 **Q: IS A SPECIFIC LOCAL CAPACITY REQUIREMENT FOR EACH**
15 **POTENTIAL CAPACITY ZONE DEVELOPED?**

16 **A.** Yes. In accordance with section III.12.2 of the Tariff, local capacity requirements
17 are developed for all potential Capacity Zones. A Local Sourcing Requirement is
18 developed for each import-constrained Load Zone and a Maximum Capacity
19 Limit is developed for each export-constrained Load Zone.

20

21 **Q: WHAT IS THE LOCAL SOURCING REQUIREMENT?**

22 **A.** The Local Sourcing Requirement is the minimum amount of capacity that must be
23 electrically located within an import-constrained Load Zone after taking into

1 consideration the amount of transfer capability into the zone from the rest of New
2 England.

3
4 **Q: WHAT IS THE MAXIMUM CAPACITY LIMIT?**

5 **A.** The Maximum Capacity Limit is the maximum amount of resources that can be
6 procured from an export-constrained Load Zone to meet the Installed Capacity
7 Requirement. Generally speaking, this is the amount of capacity that can be used
8 to fully meet the needs within the export-constrained Load Zone plus that amount
9 which can be exported from the Load Zone to meet regional needs. It is a
10 mechanism designed to limit the amount of capacity that may be procured in an
11 export-constrained area to avoid purchasing “bottled-in” capacity that is
12 unavailable to the rest of New England.

13
14 **Q: PLEASE DESCRIBE THE EXISTING METHODOLOGY THE ISO USES
15 TO DETERMINE THE LOCAL SOURCING REQUIREMENT FOR AN
16 IMPORT-CONSTRAINED ZONE.**

17 **A.** The existing methodology the ISO uses to determine the Local Sourcing
18 Requirement (“LSR”) is described in section III.12.2 of the Tariff. In this
19 methodology, the LSR is a probabilistic adequacy requirement that represents the
20 minimum amount of capacity that must be electrically located within an import-
21 constrained load zone to satisfy the resource adequacy planning criterion defined
22 for the New England Control Area. The resource adequacy planning criterion
23 defined for the New England Control Area is a probabilistic requirement based on
24 disconnecting non-interruptible customers, on average, no more than once every

1 ten years (or an annual LOLE of 0.1) due to a resource deficiency. This analysis
2 is conducted using a two-area model, where one area is the local zone for which
3 the requirement is being determined, and the second area is an aggregation of the
4 electric system outside the local zone. In the current analytic process, if the
5 system has surplus capacity (the system has more capacity than is required to
6 meet the resource adequacy planning criterion) the aggregated system is assumed
7 to include all presently interconnected resources. To use the more common term,
8 this probabilistic local adequacy requirement is presently calculated on an “as-is”
9 basis, and may count on contributions from resources in excess of the Installed
10 Capacity Requirement and therefore without an obligation to participate in the
11 market.

12
13 **Q: ARE THERE CONCERNS WITH THE ISO’S EXISTING PROBABLISTIC**
14 **METHODOLOGY FOR DETERMINING LOCAL SOURCING**
15 **REQUIREMENTS?**

16 **A.** Yes. The ISO’s existing probabilistic methodology for determining local
17 sourcing requirements does not capture all reliability needs. More specifically, it
18 does not reflect the ability of a zone to meet the transmission security
19 requirements specified in ISO Planning Procedure No. 3 (“PP-3”) and Northeast
20 Power Coordinating Council Document A-2 (“NPCC A-2”). In contrast to the
21 calculation of the LSR, the reliability review of all de-list bids uses or observes
22 the PP-3 and NPCC A-2 transmission security requirements. As a consequence,
23 different standards are used to set capacity requirements for the FCA as compared

1 to the reliability review of capacity that seeks to de-list. In addition to the
2 transmission security issue, as described in the previous answer ISO has concerns
3 with counting on contributions from resources without an obligation to the market
4 for the calculation of probabilistic local sourcing requirements.

5
6 **Q: DESCRIBE THE METHODOLOGY USED FOR DETERMINING AN**
7 **IMPORT-CONSTRAINED ZONE’S TRANSMISSION SECURITY**
8 **ANALYSIS REQUIREMENT?**

9 **A.** The Transmission Security Analysis (“TSA”) is a deterministic reliability screen
10 of an import constrained area and is a basic security review set out in Section 5 of
11 NPCC A-2. This review determines the requirement of the sub-area to meet its
12 load through internal generation and import capacity and is performed via a series
13 of discrete transmission load flow study scenarios. In performing the analysis,
14 static transmission interface transfer limits may be established as a reasonable
15 representation of the transmission system’s capability to serve sub-area load with
16 available existing resources and results may be presented under the form of a
17 deterministic operable capacity analysis. In accordance with PP-3 and NPCC A-
18 2, this analysis also includes evaluations of both (1) the loss of the largest
19 generating unit and the most critical transmission element (“Line-Gen”), and (2)
20 the loss of the most critical transmission element followed by loss of the next
21 most critical transmission element (“Line-Line”). These deterministic analyses
22 are currently used each day by System Operations to assess the amount of
23 capacity to be committed day-ahead. Further, such deterministic sub-area

1 transmission security analyses have consistently been used for reliability need
2 studies performed to determine if a unit seeking to retire would violate reliability
3 criteria. The deterministic sub-area transmission security analyses also are used
4 to see whether a generating unit seeking a determination of reliability need (as the
5 basis for a cost of service reliability agreement under the currently-effective
6 rules), would violate reliability criteria. Finally, the Commission explicitly
7 approved application of the transmission security analysis in the order approving
8 the results of the first FCA and the rejection of the Norwalk Harbor Unit de-list
9 bids.²

10

11 **Q: IS IT APPROPRIATE TO USE A TRANSMISSION SECURITY**
12 **ANALYSIS TO DETERMINE A ZONE'S CAPACITY REQUIREMENT?**

13 **A.** Yes. The different types of analyses and their associated requirements are based
14 on two different analytical methodologies and complementary reliability needs.
15 The current LSR calculation is a determination of resource needs in a zone using
16 data and probabilistic mathematics that would capture the assumed uncertainties
17 associated with demand and resource availability to meet the resource adequacy
18 planning reliability criterion. The TSA requirement calculation is a determination
19 of resource needs in a zone using deterministic load flows that capture the ability
20 of the system to meet its load through internal generation and import capacity
21 under a discrete set of operating conditions, consistent with transmission security
22 planning criteria. The current LSR and TSA analyses are two distinct ways of

² See the Commission's June 20, 2008 order in Docket No ER08-633-000, *ISO New England Inc.*, 123 FERC ¶ 61,290 at P 26 (2008).

1 determining the resource needs in a local area and each should be respected in the
2 FCM. In addition, the Commission has affirmed the appropriateness of each
3 approach in setting capacity requirements for local areas.³

4

5 **Q: HOW DO THE RULE CHANGES ALTER THE CALCULATION OF**
6 **LOCAL SOURCING REQUIREMENTS?**

7 **A.** To harmonize the criteria used to determine Local Sourcing Requirements with
8 the criteria used in the Transmission Security Analysis studies performed for the
9 de-list bids reliability reviews, the Rule Changes provide for a new Local
10 Sourcing Requirement in the FCA. This new Local Sourcing Requirement for an
11 import-constrained zone will be the amount of capacity needed to satisfy the
12 higher of: (i) the Local Sourcing Requirement as currently determined or (ii) the

³ *Id.* at P 26. The Commission stated that:

[i]mplementing the February 2008 FCA, ISO-NE properly relied on both transmission system security and resource adequacy criteria. NPCC defines reliability as having two elements: system security and resource adequacy. In essence, system security is "the ability of the system to withstand disturbances," whereas resource adequacy "represents the ability of the system to meet the aggregate power and energy requirement of all consumers at all times.

Id. (emphasis added). The Commission also stated that it noted:

that section III.13.2.5.2.5 of ISO-NE's tariff establishes that capacity shall be deemed needed for reliability reasons if the absence of the capacity would result in the violation of any NERC or NPCC (or their successors) criteria, or ISO New England System Rules. Thus, the TSA is not a method to establish a new ICR, but rather an analysis to ensure transmission system security (rather than resource adequacy) for units seeking to de-list. [Intervenors] ignore both the NPCC definition of "reliability" as well as ISO-NE's requirement to conform to NPCC reliability criteria. As ISO-NE explains in its answer, "security," along with resource adequacy, is a key element of reliability, consistent with NPCC's definition. As such, any assessment of whether the loss of a capacity resource would violate North American Electric Reliability Corporation (NERC), NPCC, or ISO-NE reliability criteria as required by section III.13.2.5.2.5 of the ISO-NE Tariff would necessarily require an analysis of the loss's effect on the security of the New England transmission system.

Id. at P 30 (citations omitted, emphasis added).

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1 Transmission Security Analysis requirement. To facilitate this restructuring, what
2 is currently described in the rules as the “Local Sourcing Requirement” is being
3 renamed the “Local Resource Adequacy” requirement (“LRA”). This new label
4 is appropriate because, as noted earlier, that calculation uses resource adequacy
5 planning reliability criteria. The term Local Sourcing Requirement will be
6 retained, but will now be used to describe the higher of the LRA and the TSA, and
7 is the purchase quantity used in the auction.

8
9 In addition, to address the previously described concerns over the use of the
10 surplus capacity without market obligations in the LRA calculation, the Rule
11 Changes provide that the LRA will be calculated based on the exact MW amount
12 of resources that has been determined to be the Installed Capacity Requirement
13 (“ICR”) for the relevant Capacity Commitment Period. That is, the exact MW
14 amount of resources needed to meet the regional one-day-in-ten standard will be
15 used to calculate the LRA. Without this rule change, the LRA would be
16 calculated based on the assumption that the all the resources that have qualified to
17 participate in the FCA will be available to meet system needs; where in actuality,
18 under capacity surplus conditions, the units that have no Capacity Supply
19 Obligation are not required to participate in any of the ISO markets. Properly
20 counting on only the capacity that has an obligation to serve will identify the
21 correct LRA necessary to ensure system reliability. During discussions with
22 stakeholders about the LSR, questions were raised regarding possible
23 participation of capacity resources without a Capacity Supply Obligation, in the

1 energy markets that could contribute toward system reliability. As described in
2 the filing letter, the ISO has committed to study the participation and contribution
3 to system reliability of resources without a Capacity Supply Obligation on a
4 prospective basis. The ISO will collect data regarding the participation of
5 resources without a Capacity Supply Obligation for the first two Capacity
6 Commitment Periods and will discuss the data with stakeholders and whether
7 further action is appropriate.

8

9 **Q: DO THE RULE CHANGES MODIFY ANY ASPECTS OF EITHER THE**
10 **NEW LOCAL RESOURCE ADEQUACY REQUIREMENT ANALYSIS**
11 **OR TRANSMISSION SECURITY ANALYSIS ASSUMPTIONS?**

12 A. As part of the “higher of” approach described above, the Rule Changes modify
13 some of the assumptions used in the Transmission Security Analysis. These
14 changes are intended to increase the level of consistency between the LRA and
15 TSA requirement calculations and to better account for the capacity that has an
16 obligation to the New England markets in the TSA analyses. More specifically,
17 based on observed improvements in the starting reliability of peaking resources,
18 possibly in response to the incentives in the Locational Forward Reserve market,
19 the ISO is proposing to reduce the deterministic discount factor applied to peaking
20 resources from 33% to 20%. In addition, because of changes to ISO emergency
21 procedures that improve the ability of ISO to rely upon Real-Time Emergency
22 Generator resources, these resources will also be included in the deterministic
23 analysis. All assumptions used in the Transmission Security Analysis are

1 described in ISO's Planning Procedure No. 10 (PP-10). It is the ISO's intention
2 to update PP-10 based on this change. Also, as the ISO's experience with the
3 Forward Capacity Market grows, the ISO is committed to reviewing the
4 assumptions used in the calculation of the Local Sourcing Requirements and to
5 continue updating PP-10 to reflect the latest assumptions.

6

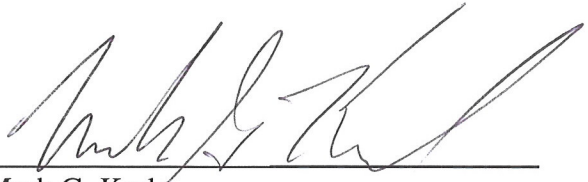
7 **Q: DOES THIS CONCLUDE YOUR TESTIMONY?**

8 **A.** Yes.

1 I declare under penalty of perjury that the foregoing is true and correct.

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Executed on February 19, 2010



Mark G. Karl

Sworn to before me, this 19th day of February, 2010

Lorraine M. Brady
Notary



ATTACHMENT 5

Testimony of David LaPlante

On behalf of the ISO

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

ISO New England Inc.

)

Docket No. ER10-____-000

PREPARED TESTIMONY OF

DAVID LAPLANTE

ON BEHALF OF ISO NEW ENGLAND INC.

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

2 **A.** My name is David LaPlante. I am Vice President, Internal Market Monitoring
3 Unit with ISO New England Inc. (the "ISO"). My business address is One
4 Sullivan Road, Holyoke, Massachusetts 01040.

5
6 **Q: PLEASE DESCRIBE YOUR WORK EXPERIENCE AND EDUCATIONAL
7 BACKGROUND.**

8 **A.** I have a Bachelor's degree in statistics from Princeton University and a Master's
9 Degree in City and Regional Planning from Harvard University. I have over 22
10 years experience in the energy and utility industry. Between 1989 and 1994, I
11 spent five years supervising and conducting power system reliability studies at the
12 New England Power Pool ("NEPOOL"). I have been working on the
13 deregulation of the wholesale electric industry in New England since 1994. When
14 serious discussions about deregulation in New England began, I was part of the
15 team that negotiated the contract between the ISO and NEPOOL that led to the
16 creation of the ISO in 1997. I then led the ISO team that worked with NEPOOL

1 to develop and implement the region's first set of wholesale markets in 1999.
2 Following that, I was responsible for the market design portion of the Standard
3 Market Design implemented by the ISO in March 2003. I was integrally involved
4 in the FCM settlement agreement and in the development of the FCM rules. In
5 July 2008, I was promoted to Vice President of the Internal Market Monitoring
6 Unit.

7
8 **Q: WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

9 **A.** The purpose of this testimony is to explain the reasons for some of the instant
10 changes to the provisions of the ISO Transmission, Markets and Services Tariff
11 (“Tariff”) that govern the FCM made in this filing (“Rule Changes”). In
12 particular, I discuss the reasons for tariff changes regarding the Internal Market
13 Monitor’s review of offers below 0.75 times CONE, the ISO’s reporting
14 obligations regarding offers below 0.75 times CONE, and the Pivotal Supplier test
15 used to determine which one-year de-list bids are eligible to affect the creation
16 and pricing of import-constrained Capacity Zones.

17
18 **A. REVIEW OF OFFERS BELOW 0.75 TIMES CONE**

19
20 **Q: WHAT IS THE PURPOSE OF THE RULE CHANGES CONCERNING**
21 **THE REVIEW OF OFFERS BELOW 0.75 TIMES CONE UNDER**
22 **SECTIONS III.13.1.1.2.6 AND III.13.1.4.2.4(b) OF THE TARIFF?**

1 **A.** The purpose of these Rule Changes is to provide more detail regarding the
2 treatment of revenues from outside the wholesale electricity markets in the
3 determination of whether offers into the Forward Capacity Market are treated as
4 in-market and eligible to set the clearing price, or as out-of-market and counted as
5 out-of-market capacity, for purposes of potentially triggering the Alternative
6 Capacity Price Rule, an administrative pricing mechanism. The Rule Changes
7 specify that only revenues available to resources throughout the New England
8 region and available to all resources of the same type can be counted as in-market
9 revenues. By only counting revenues available to all participants throughout the
10 region as in-market, these changes prevent revenues targeted to a specific locale
11 or a specific subset of participants from distorting prices in the regional market.

12
13 The changes also clarify that conventional economic development incentives, e.g.
14 property tax reductions used by state and local communities to attract industry,
15 are considered in-market revenues, unless those incentives were expressly
16 intended to lower the price in the FCM. Conventional economic development
17 incentives are generally available to a wide range of industries and therefore
18 proper to include as in market revenues.

19
20 **Q: WILL THESE RULES CHANGES ALTER THE DETERMINATION OF**
21 **WHETHER A SPECIFIC PROJECT IS FOUND TO BE IN-MARKET OR**
22 **OUT-OF-MARKET?**

1 A. No. These Rule Changes provide more detail concerning the out-of-market
2 determinations in the current rule but do not change the current Tariff's basic
3 principle that differentiates out-of-market capacity from in-market capacity. The
4 basic principle in the current Tariff that differentiates in-market capacity from
5 out-of-market capacity is that if the revenues of a given project are consistent with
6 the revenues available through the wholesale market, then those revenues are
7 considered in market. Revenues that are not consistent with wholesale market
8 revenues are considered out of market revenues. Since these rules simply make
9 the process used to determine in-market and out-of-market revenues more
10 transparent by adding detail to the tariff language, the tariff additions will not
11 change whether a project will be in or out of market. Therefore they will not
12 affect the frequency with which the Alternative Capacity Price Rule will be
13 invoked.

14

15 **Q: WHAT ARE THE BENEFITS OF PROVIDING MORE DETAIL**
16 **CONCERNING THE DETERMINATION OF WHICH REVENUES ARE**
17 **IN MARKET AND WHICH ARE OUT OF MARKET?**

18 A. These changes increase transparency and provide market participants greater
19 information regarding the determinations of whether capacity is in-market or out-
20 of-market, thereby providing a framework for improved reporting on these
21 determinations.

22

1 **Q: WHAT IS THE PURPOSE OF THE RULE CHANGES IN SECTION**
2 **III.13.8.1(a) OF THE TARIFF REQUIRING THE FILING OF MORE**
3 **INFORMATION ON THE DETERMINATION OF WHETHER**
4 **RESOURCES THAT WISH TO STAY IN THE AUCTION AT PRICES**
5 **BELOW 0.75 TIMES CONE ARE IN MARKET OR OUT OF MARKET?**

6 **A.** The Rule Changes provide additional information about the reasons resources stay
7 in the market below 0.75 times CONE. Section III.13.8.1 requires the ISO to file
8 an informational filing prior to each Forward Capacity Auction (“FCA”)
9 describing the ISO’s determinations with respect to that FCA and to provide
10 supporting documentation for such determinations. The Rule Changes require
11 additional reporting on the Internal Market Monitor’s determinations regarding
12 each offer below 0.75 times CONE (including offers determined by the Internal
13 Market Monitor to be in-market as well as out-of-market). The additional
14 information includes each of the elements considered in the Internal Market
15 Monitor’s determination of expected net revenues (other than revenues from ISO-
16 administered markets) and whether that element was included in or excluded from
17 the determination of whether the offer is consistent with the resource’s long run
18 average costs net of expected revenues other than capacity revenues. These Rule
19 Changes were drafted in response to a desire for better information and reporting
20 to stakeholders.

21

1 **Q: THE REPORT ON THE FORWARD CAPACITY MARKET IN JUNE OF**
2 **LAST YEAR RECOMMENDED ALLOWING PERMANENT DE-LIST**
3 **BIDS TO BE CONSIDERED IN FORMING CAPACITY ZONES.**
4 **SHOULD NON PRICE RETIREMENT BIDS ALSO BE CONSIDERED IN**
5 **THE FORMATION OF NEW CAPACITY ZONES?**

6 **A.** Yes. The June Report explained that allowing Permanent De-List Bids to set
7 price and affect zonal price creation was efficient and improves price formation
8 because Permanent De-List Bids were likely to be competitive rather than an
9 attempt to exercise market power (*i.e.*, reflect the resource's true going forward
10 cost), since if a Permanent De-List Bid clears the market, it must exit the capacity
11 market permanently. The consequences of a non-price retirement request clearing
12 the market are even more severe than those faced by a Permanent De-List Bid; the
13 resource must retire from all markets, including the energy market. These
14 consequences mean that non-price retirement bids are likely to be competitive and
15 not an exercise of market power. Therefore they should be allowed to affect
16 zonal creation and price formation.

17
18 **Q: SHOULD STATIC DE-LIST BIDS FROM NON-PIVOTAL SUPPLIERS,**
19 **EXPORT BIDS FROM NON-PIVOTAL SUPPLIERS AND**
20 **ADMINISTRATIVE EXPORT DE-LIST BIDS FROM NON-PIVOTAL**
21 **SUPPLIERS BE CONSIDERED IN THE FORMATION OF NEW**
22 **CAPACITY ZONES?**

1 **A.** Yes. Price formation in the FCA is improved and made more efficient by
2 including these bids in zonal formation and pricing, if the bids are competitive
3 and are not an attempt to exercise market power (*i.e.*, reflect the resource’s true
4 going forward cost). The Pivotal Supplier test I discuss later in my testimony
5 distinguishes those suppliers who might have the ability and incentive to exercise
6 market power and offer non-competitively (Pivotal Suppliers) from those that are
7 unlikely to do be able to do so and likely to offer competitively (non-pivotal
8 suppliers). The capacity associated with Static De-List Bids, Export Bids, and
9 Administrative Export De-List Bids from non- pivotal suppliers is not needed to
10 meet a Capacity Zone’s Local Sourcing Requirement. Such bids are likely to be
11 competitive and reflect the resource’s true going forward cost rather than
12 represent an attempt to exercise market power. As described in more detail
13 below, since Static De-List Bids, Export Bids, and Administrative Export De-List
14 Bids from non-pivotal suppliers are likely to be competitive, they should be
15 included in zonal creation and pricing.

16

17 **Q: PLEASE DESCRIBE THE PIVOTAL SUPPLIER TEST USED TO**
18 **DETERMINE WHETHER A STATIC DE-LIST BID, EXPORT BID, OR**
19 **ADMINISTRATIVE EXPORT DE-LIST BID CAN AFFECT ZONAL**
20 **CREATION AND PRICING?**

21 **A.** The test used to determine if such bids from a supplier can affect zonal creation
22 and pricing is the single Pivotal Supplier test. This test determines whether the
23 local sourcing requirement for a zone can be met without any capacity from an

1 individual participant. If some capacity from an individual supplier is needed,
2 then that supplier is considered pivotal. The calculation appropriately reduces the
3 amount of existing capacity by any non-price retirement requests.

4

5 **Q: DOES THIS TEST ADEQUATELY PROTECT AGAINST THE**
6 **EXERCISE OF MARKET POWER IN THE CREATION AND PRICING**
7 **OF ZONES?**

8 **A:** Yes. Since a non-pivotal supplier is unable to unilaterally set the zonal price and
9 its capacity is not necessary to satisfy the zone's local sourcing requirement, the
10 resource faces competition in attempting to leave the FCA. If the resource offers
11 too high a price, it runs the risk of having its offer to leave the FCA accepted,
12 thereby forgoing a profitable opportunity in the capacity market. This financial
13 incentive encourages a resource to offer its true going forward cost and thereby
14 fosters an efficient market outcome.

15

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

17 **A.** Yes.

1 I declare under penalty of perjury that the foregoing is true and correct.

2
3 Executed on 2/19/10
4

5
6
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8 
9 _____
David LaPlante

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Sworn to before me, this 19th day of February, 2010

Linda M. Morrison
Notary
Linda M. Morrison
My Commission Expires: 1-28-2011

ATTACHMENT 6

Tabulation of the NEPOOL Participants Committee votes

**ROLL CALL VOTES TAKEN AT FEBRUARY 5, 2010
NEPOOL PARTICIPANTS COMMITTEE MEETING
FCM REVISIONS TO MARKET RULE 1**

TOTAL

SECTOR	VOTE 2	VOTE 3	VOTE 4	VOTE 5	VOTE 6	VOTE 7	VOTE 8	VOTE 9	VOTE 10	VOTE 11
GENERATION	17.30	17.30	17.30	17.30	17.30	17.30	0.00	17.30	17.30	0.00
TRANSMISSION	0.00	0.00	0.00	0.00	0.00	0.00	17.30	0.00	0.00	17.30
SUPPLIER	8.65	17.30	17.30	17.30	10.49	17.30	6.65	17.30	14.55	6.29
ALTERNATIVE RESOURCES	1.95	1.95	1.95	1.95	1.95	1.95	11.55	1.95	1.95	13.50
PUBLICLY OWNED ENTITY	0.00	0.00	0.00	0.00	0.00	0.00	17.30	0.00	0.00	17.30
END USER	<u>0.00</u>	<u>0.00</u>	<u>5.19</u>	<u>0.00</u>	<u>0.00</u>	<u>0.00</u>	<u>17.30</u>	<u>0.00</u>	<u>0.00</u>	<u>17.30</u>
% IN FAVOR	27.90	36.55	41.74	36.55	29.74	36.55	70.10	36.55	33.80	71.69

Vote 2: GDF Suez Amendment No. 1 Regarding Generation and Import Capacity Participation

Vote 3: Mirant Amendments (INTMMU Review of New Offers Below 0.75 times CONE)

Vote 4: NRG Amendment Regarding De-List Bids and Price Setting in Capacity Zones

Vote 5: PSEG Amendment No. 1 (Pivotal Supplier Definition)

Vote 6: PSEG Amendment No. 2 (ISO Requests for Energy)

Vote 7: GDF Suez Amendment No. 1 (ISO Requests for Energy)

Vote 8: Main Motion (FCM Revisions to Market Rule 1, Section 13)

Vote 9: NRG Amendment Regarding Capacity Zones

Vote 10: GDF Suez Amendment Regarding TSA Requirements

Vote 11: Main Motion (FCM Revisions to Market Rule 1, Section 12)

**ROLL CALL VOTES TAKEN AT FEBRUARY 5, 2010
NEPOOL PARTICIPANTS COMMITTEE MEETING
FCM REVISIONS TO MARKET RULE 1**

GENERATION

Participant Name	Vote 2	Vote 3	Vote 4	Vote 5	Vote 6	Vote 7	Vote 8	Vote 9	Vote 10	Vote 11
BG Dighton Power	F	F	F	F	F	F	O	F	F	A
Boston Generating	F	F	F	F	F	F	O	F	F	A
Caithness New England	F	F	F	F	F	F	O	F	F	O
Dominion Energy Marketing	F	F	F	F	F	F	O	F	F	O
Entergy Nuclear Power	F	F	F	F	F	F	O	F	F	O
International Power America	F	F	F	F	F	F	O	F	F	O
Millennium Power Partners	F	F	F	F	F	F	O	F	F	O
Mirant Energy Trading	F	F	F	F	F	F	O	F	F	O
NAEA Energy of Massachusetts	F	F	F	F	F	F	O	F	F	O
NextEra Energy Resources	F	F	F	F	F	F	O	F	F	O
NRG Power Marketing	F	F	F	F	F	F	O	F	F	O
TransCanada Power Marketing	F	F	F	F	F	F	O	F	F	O
Provisional Member Group	F	F	F	F	F	F	O	F	F	O
IN FAVOR (F)	12	12	12	12	12	12	0	12	12	0
OPPOSED (O)	0	0	0	0	0	0	12	0	0	10
TOTAL VOTES	12	12	12	12	12	12	12	12	12	10
ABSTENTIONS (A)	0	0	0	0	0	0	0	0	0	2

TRANSMISSION

Participant Name	Vote 2	Vote 3	Vote 4	Vote 5	Vote 6	Vote 7	Vote 8	Vote 9	Vote 10	Vote 11
Bangor Hydro-Electric Co.	O	O	O	O	O	O	F	A	O	F
Central Maine Power Co.	O	O	O	O	O	O	F	O	O	F
New England Power Co.	O	O	O	O	O	O	F	O	O	F
The United Illuminating Co.	O	O	O	O	O	O	F	O	O	F
Northeast Utilities System Co.	O	O	O	O	O	O	F	O	O	F
NSTAR Electric Co.	O	O	O	O	O	O	F	O	O	F
Vermont Electric Power Co.	O	O	O	O	O	O	F	O	O	F
IN FAVOR (F)	0	0	0	0	0	0	7	0	0	7
OPPOSED (O)	7	7	7	7	7	7	0	6	7	0
TOTAL VOTES	7	7	7	7	7	7	7	6	7	7
ABSTENTIONS (A)	0	0	0	0	0	0	0	1	0	0

**ROLL CALL VOTES TAKEN AT FEBRUARY 5, 2010
NEPOOL PARTICIPANTS COMMITTEE MEETING
FCM REVISIONS TO MARKET RULE 1**

SUPPLIER

Participant Name	Vote 2	Vote 3	Vote 4	Vote 5	Vote 6	Vote 7	Vote 8	Vote 9	Vote 10	Vote 11
BP Energy Co.	A	A	A	A	O	A	A	A	A	A
Brookfield / CSC ¹										
<i>Brookfield Energy Marketing</i>	A	F	A	F	F	F	O	A	O	O
<i>Cross-Sound Cable Company</i>	A	A	A	A	A	F	O	A	A	O
Consolidated Edison Energy	A	A	F	A	A	F	A	F	F	O
Constellation Energy Commodities Grp	O	A	A	A	A	A	F	F	F	O
DC Energy	A	A	A	A	A	A	A	--	--	--
Dynegy/Calpine	F	F	F	F	F	F	O	--	O	O
Energy America	O	A	F	A	O	F	F	F	F	F
Exelon Generation	A	F	F	F	F	F	O	F	F	A
GDF SUEZ / FirstLight	F	F	F	F	F	F	O	F	F	O
Granite Ridge / Merrill Lynch / BoA	F	F	F	F	F	F	O	F	F	A
H.Q. Energy Services (U.S.)	A	F	F	F	F	F	A	F	F	A
Hess Corporation	O	A	F	A	O	F	F	F	A	F
Integrus Energy Services	O	A	F	A	O	F	F	F	A	F
LIPA	F	A	A	A	A	A	O	A	A	O
Pepco Energy Services	O	A	A	A	O	F	F	A	A	F
Pinpoint Power	A	A	F	A	A	A	A	F	F	A
PPL EnergyPlus	A	F	F	F	F	F	O	--	--	A
PSEG Energy Resources & Trade	F	F	F	F	F	F	O	F	F	O
IN FAVOR (F)	5	7.7	12	7.7	7.7	13	5	11	9	4
OPPOSED (O)	5	0	0	0	5	0	8	0	1.7	7
TOTAL VOTES	10	7.7	12	7.7	12.7	13	13	11	10.7	11
ABSTENTIONS (A)	8	10.3	6	10.3	5.3	5	5	4	5.3	6

¹ Brookfield and CSC, which are Related Persons, have elected to split their vote as follows: Brookfield - 70%; CSC – 30%.

**ROLL CALL VOTES TAKEN AT FEBRUARY 5, 2010
NEPOOL PARTICIPANTS COMMITTEE MEETING
FCM REVISIONS TO MARKET RULE 1**

ALTERNATIVE RESOURCES

Participant Name	Vote 2	Vote 3	Vote 4	Vote 5	Vote 6	Vote 7	Vote 8	Vote 9	Vote 10	Vote 11
Renewable Generation										
Gas Recovery Systems	O	O	O	O	O	O	F	O	O	F
Small RG Group Member	F	F	F	F	F	F	O	F	F	F
Distributed Generation										
Small DG Group Member	O	O	O	O	O	O	F	O	O	F
Load Response										
Comverge	O	O	O	O	O	O	F	O	O	F
Conservation Services Group	O	O	O	O	O	O	F	O	O	F
CPower	O	O	O	O	O	O	F	O	O	F
EnerNOC	O	O	O	O	O	O	F	O	O	F
Vermont Energy Investment Corp.	O	O	O	O	O	O	F	O	O	F
Small LR Group Member	O	O	O	O	O	O	F	O	O	F
IN FAVOR (F)	1	1	1	1	1	1	8	1	1	9
OPPOSED (O)	8	8	8	8	8	8	1	8	8	0
TOTAL VOTES	9	9	9	9	9	9	9	9	9	9
ABSTENTIONS (A)	0	0	0	0	0	0	0	0	0	0

**ROLL CALL VOTES TAKEN AT FEBRUARY 5, 2010
NEPOOL PARTICIPANTS COMMITTEE MEETING
FCM REVISIONS TO MARKET RULE 1**

PUBLICLY OWNED ENTITY

Participant Name	Vote 2	Vote 3	Vote 4	Vote 5	Vote 6	Vote 7	Vote 8	Vote 9	Vote 10	Vote 11
Ashburnham Municipal Light Plant	O	O	O	O	O	O	F	O	O	F
Boylston Municipal Light Dept.	O	O	O	O	O	O	F	O	O	F
Braintree Electric Light Dept.	O	O	O	O	O	O	F	O	O	F
Chicopee Municipal Lighting Plant	O	O	O	O	O	O	F	O	O	F
Concord Municipal Light Plant	O	O	O	O	O	O	F	O	O	F
Conn. Municipal Electric Energy Coop.	O	O	O	O	O	O	F	O	O	F
Groton Electric Light Dept.	O	O	O	O	O	O	F	O	O	F
Hingham Municipal Lighting Plant	O	O	O	O	O	O	F	O	O	F
Holden Municipal Light Dept.	O	O	O	O	O	O	F	O	O	F
Holyoke Gas & Electric Dept.	O	O	O	O	O	O	F	O	O	F
Hudson Light and Power Dept.	O	O	O	O	O	O	F	O	O	F
Hull Municipal Lighting Plant	O	O	O	O	O	O	F	O	O	F
Ipswich Municipal Light Dept.	O	O	O	O	O	O	F	O	O	F
Littleton (NH) Water & Light Dept.	O	O	O	O	O	O	F	O	O	F
Mansfield Municipal Electric Dept.	O	O	O	O	O	O	F	O	O	F
Marblehead Municipal Light Dept.	O	O	O	O	O	O	F	O	O	F
Mass. Municipal Wholesale Electric Co.	O	O	O	O	O	O	F	O	O	F
Middleborough Gas and Electric Dept.	O	O	O	O	O	O	F	O	O	F
Middleton Municipal Electric Dept.	O	O	O	O	O	O	F	O	O	F
Pascoag Utility District	O	O	O	O	O	O	F	O	O	F
Paxton Municipal Light Dept.	O	O	O	O	O	O	F	O	O	F
Peabody Municipal Light Plant	O	O	O	O	O	O	F	O	O	F
Princeton Municipal Light Dept.	O	O	O	O	O	O	F	O	O	F
Rowley Municipal Lighting Plant	O	O	O	O	O	O	F	O	O	F
Shrewsbury Electric & Cable Ops.	O	O	O	O	O	O	F	O	O	F
South Hadley Electric Light Dept.	O	O	O	O	O	O	F	O	O	F
Sterling Municipal Electric Light Dept.	O	O	O	O	O	O	F	O	O	F
Taunton Municipal Lighting Plant	O	O	O	O	O	O	F	O	O	F
Templeton Municipal Lighting Plant	O	O	O	O	O	O	F	O	O	F
Vermont Electric Cooperative	O	O	O	O	O	O	F	O	O	F
Wakefield Municipal Gas & Light Dept.	O	O	O	O	O	O	F	O	O	F
West Boylston Municipal Lighting Plant	O	O	O	O	O	O	F	O	O	F
Westfield Gas & Electric Light Dept.	O	O	O	O	O	O	F	O	O	F
IN FAVOR (F)	0	0	0	0	0	0	33	0	0	33
OPPOSED (O)	33	33	33	33	33	33	0	33	33	0
TOTAL VOTES	33	33	33	33	33	33	33	33	33	33
ABSTENTIONS (A)	0	0	0	0	0	0	0	0	0	0

**ROLL CALL VOTES TAKEN AT FEBRUARY 5, 2010
NEPOOL PARTICIPANTS COMMITTEE MEETING
FCM REVISIONS TO MARKET RULE 1**

END USER

Participant Name	Vote 2	Vote 3	Vote 4	Vote 5	Vote 6	Vote 7	Vote 8	Vote 9	Vote 10	Vote 11
511 Plaza	O	O	A	O	O	O	F	A	A	F
CT Office of Consumer Counsel	O	O	O	O	O	O	A	O	O	F
Conservation Law Foundation	O	O	A	A	A	A	F	A	A	F
Corinth Wood Pellets	O	O	A	O	O	O	F	A	A	F
Dennis Beverage	O	O	A	O	O	O	F	A	A	F
Dragon Products Co.	O	O	A	O	O	O	F	A	A	F
Elektrisola, Inc.	O	O	A	O	O	O	F	A	A	F
Fairchild Semiconductor Corp.	O	O	A	O	O	O	F	A	A	F
Food City, Inc.	O	O	A	O	O	O	F	A	A	F
Garland Manufacturing Co.	O	O	A	O	O	O	F	A	A	F
Hammond Lumber Co.	O	O	A	O	O	O	F	A	A	F
Hardwood Products Co.	O	O	A	O	O	O	F	A	A	F
Harvard Dedicated Energy Limited	O	O	O	O	O	O	F	O	O	F
Industrial Energy Consumer Group	O	O	F	O	O	O	F	--	--	--
LaBree's	O	O	A	O	O	O	F	A	A	F
Lavalley Lumber Co.	O	O	A	O	O	O	F	A	A	F
Maine Skiing	O	O	F	O	O	O	F	--	--	--
Maine Woods Pellet Co.	O	O	A	O	O	O	F	A	A	F
Marden's	O	O	A	O	O	O	F	A	A	F
Mass. Attorney General's Office	O	O	O	O	O	O	F	O	O	F
Mead Oxford	O	O	F	O	O	O	F	--	--	--
Merchants Plaza	O	O	A	O	O	O	F	A	A	F
NH Office of Consumer Advocate	O	O	O	O	O	O	A	O	O	F
PalletOne of Maine	O	O	A	O	O	O	F	A	A	F
PowerOptions	O	O	O	O	O	O	F	O	O	F
Quality Egg of New England	O	O	A	O	O	O	F	A	A	F
RJF – Morin Brick	O	O	A	O	O	O	F	A	A	F
Robbins Lumber	O	O	A	O	O	O	F	A	A	F
St. Anselm College	O	O	A	O	O	O	F	A	A	F
St. Joseph Health Services of RI	O	O	A	O	O	O	F	A	A	F
The Energy Consortium	O	O	O	O	O	O	F	O	O	F
The Energy Council of RI	O	O	O	O	O	O	F	O	O	F
Union of Concerned Scientists	O	O	A	A	A	A	F	A	A	F
Westerly Hospital	O	O	A	O	O	O	F	A	A	F
Whole Foods Market Group	O	O	A	O	O	O	F	A	A	F
Z-TECH, LLC	O	O	A	O	O	O	F	A	A	F
IN FAVOR (F)	0	0	3	0	0	0	34	0	0	33
OPPOSED (O)	36	36	7	34	34	34	0	7	7	0
TOTAL VOTES	36	36	10	34	34	34	34	7	7	33
ABSTENTIONS (A)	0	0	26	2	2	2	2	26	26	0

ATTACHMENT 7

List of New England Governors and Utility Regulatory Agencies

The Honorable M. Jodi Rell
State Capitol
210 Capitol Ave.
Hartford, CT 06106

Connecticut Dept. of Public Utility Control
10 Franklin Square
New Britain, CT 06051-2605

Maine Public Utilities Commission
State House, Station 18
242 State Street
Augusta, ME 04333-0018

The Honorable John E. Baldacci
One State House Station
Rm. 236
Augusta, ME 04333-0001

The Honorable Deval Patrick
Office of the Governor
Rm. 360 State House
Boston, MA 02133

Massachusetts Dept. of Public Utilities
One South Station
Boston, MA 02110

The Honorable John H. Lynch
State House
25 Capitol Street
Concord, NH 03301

New Hampshire Public Utilities Commission
21 South Fruit Street
Ste. 10
Concord, NH 03301-2429

The Honorable Donald L. Carcieri
State House Room 115
Providence, RI 02903

Rhode Island Public Utilities Commission
89 Jefferson Blvd.
Warwick, RI 02888

The Honorable James H. Douglas
109 State Street, Pavilion
Montpelier, VT 05609

Vermont Public Service Board
112 State Street, Drawer 20
Montpelier, VT 05620-2701

Harvey L. Reiter, Esq.
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1150 18th Street, N.W., Ste. 800
Washington, DC 20036-3816

William M. Nugent, Executive Director
New England Conference of Public
Utilities Commissioners
50 Forest Falls Drive, Suite 6
Yarmouth, ME 04096-6937

John Shea
Power Planning Committee
New England Governors' Conference Inc.
76 Summer Street, 2nd floor
Boston, MA 02110-1226