



David T. Doot  
Secretary

November 9, 2009

**TO:** Participants Committee Members and Alternates

**RE:** **Noticed Actions of the NEPOOL Participants Committee**

This notice summarizes actions taken by the Participants Committee at its November 6, 2009 special meeting. The official record of, and details concerning, these actions and the specific votes and outcomes will be reflected in the minutes for this meeting that will be reviewed and approved by the Committee

**Forward Capacity Market Working Group “Design Basis Document” (FCMWG DBD)**  
**(Agenda #1)**

- **Main Motion:** The Committee began this agenda item with the following main motion:

RESOLVED, that the Participants Committee supports the FCM Working Group Design Basis Document as circulated in advance of the meeting, with (i) a new Section 10 added consistent with the Brookfield-1 Amendment but with Section B revised to read “The issues identified in 10(A) will be addressed in the stakeholder process” (FCMWG DBD) and (ii) “static” inserted immediately before the phrase “de-list bids from non-pivotal suppliers” in Section 6.B, together with any further changes agreed to by the Committee at this meeting; it being understood that a vote in favor of this motion reflects a commitment by that Participant to work in good faith toward the completion and approval of Market Rule and Tariff revisions consistent with the FCMWG DBD in the NEPOOL Participant Processes.

- **⊛ NGrid-2 Amendment (Stand-Alone Amendment):** The Committee considered and unanimously approved a motion by National Grid (NGrid) to amend the main motion to replace Section 3.B<sup>1</sup> with the following provision:

B. If the Forward Capacity Auction stops at the floor price for that auction and the capacity remaining in the auction at that time exceeds the Installed Capacity Requirement relevant to that auction, individual resources may choose to either (1) pro rate its cleared MWs and be paid the full floor price for that auction or (2) leave its cleared MWs to take on a capacity supply

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<sup>1</sup> All Section references in the Notice of Actions are, unless otherwise attributed, to the FCMWG DBD.

obligation but have its payments prorated. Options (1) and (2) above shall be administered in manner consistent with the current provisions of Section III.13.2.7.3(b) [of the ISO Tariff]. Market Rules, if any, to address the compensation for individual resources that have been denied for reliability reasons the ability to pro rate their cleared MWs will be addressed in the NEPOOL Participant Processes.

- **⊗ NGrid-1 Amendment (Collective NGrid Amendment):** The Committee considered and approved a motion to amend the main motion so as to revise Sections 3.A, 6.B, 7.C.i, 7.E, and 7.F of the FCMWG DBD, in accordance with the proposed changes identified as the “Collective NGrid Amendment” that were circulated in advance of the meeting with changes as noted at the meeting. This motion to amend passed with a vote of 67.13% in favor (Generation - 0%; Transmission – 16.97%; Supplier- 1.06%; Alternative Resources – 15.17%; Publicly Owned Entity – 16.97%; and End User – 16.97%).
- **NextEra-1 Amendment:** The Committee considered and failed to approve a motion by NextEra to amend the main motion so as to replace Section 1 in its entirety with the following:
  1. APR Trigger. The APR should be triggered when any of the following conditions arises:
    - a. New OOM Capacity clears an FCA;
    - b. a De-List Bid or Non-Price Retirement Request is rejected for reliability reasons; or
    - c. there is a positive amount of Carried Forward Excess OOM Capacity.
  2. General APR Pricing Rule. The FCA Capacity Clearing Price is reset upwards to the lower of (a) \$0.01 below the price at which there were sufficient offers from resources, excluding current-year OOM Capacity, Carried Forward Excess OOM Capacity, and De-List Bids rejected for reliability reasons, or (b) CONE.
    - a. “Between” Resources Rule. Any Existing Generating Capacity Resource or Existing Demand Resource with a cleared De-List Bid that was priced below the reset Capacity Clearing Price has the option to reinstate the de-listed capacity. If any capacity is reinstated under this rule, the Capacity Clearing Price will be reduced so that the total capacity revenues are unchanged.
  3. Carried Forward Rule. OOM Capacity will be carried forward as Carried Forward Excess OOM Capacity using the following rule (which is parallel to the NYISO rule approved in FERC Docket No. EL07-39):

The length of time (in Commitment Periods) that new OOM Capacity is subject to the Carried Forward Rule shall be based on the following formula: (1) new OOM Capacity plus all surplus capacity, divided by (2) the average annual growth in ICR for the three years preceding the current FCA Commitment Periods. If the foregoing calculation extends mitigation to part of a Commitment Period, the new OOM Capacity shall remain as OOM for the entire Commitment Period.

While OOM Capacity cleared in the first three FCAs would not be included in the Carried Forward Excess OOM Capacity for the purposes of triggering the APR, such OOM should be included in the Carried Forward Excess OOM Capacity for purposes of determining the varying length of time that new OOM Capacity is subject to the Carried Forward Rule. Carried Forward Excess OOM Capacity would no longer be carried forward after the number of years determined by the rule above.

This motion to amend failed with a vote of 31.06% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 12.12%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **GDF-Suez-1 Amendment:** The Committee considered and failed to approve a motion by GDF-Suez so as to (i) add the following new Section 1.B.iii(4)(e):

(e) In addition to the items listed above, the amount of Out-of-Market would also include tie benefit megawatts attributed to expansion of external interface capability.

and (ii) add a new sentence to the end of Section 1.C.iii as follows:

For purposes of this APR-2, the Item 1.B.iii(4)(e) category of megawatts included in the Carried Forward Excess OOM Capacity will reflect the tie benefits calculated for the current FCA.

The GDF-Suez 1 Amendment failed with a vote of 27.88% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 10.91%; Alternative Resources – 0%; Publicly Owned Entity – 0%; and End User – 0%).

- **★ Mirant “Friendly” Amendment:** The Committee by acclamation and the ISO agreed to the following change in the second sentence of Section 3.C:

Such reporting could include an explanation of the reasons for categorizing capacity as out-of-market and in-market and, to the extent possible, identifying the components of the offer which were deemed out-of-market and in-market and components of the bid which not deemed out-of-market

- **Generators-1 Amendment:** The Committee considered and failed to approve a motion by Generators to amend the main motion so as to revise Section 3.A to read as follows:
  - A. Starting with the 2013/2014 Capacity Commitment Period and continuing until new capacity is needed (Net ICR – Existing Qualified Capacity  $\geq$  0), there shall be a price collar with a floor of 0.6 times Original CONE (\$7.50/kW-mo) and a ceiling of 1.4 times Original CONE. Adjust Original CONE by Handy-Whitman Index of Public Utility Construction Costs in years when it is not updated by new entry.

The Generators-1 Amendment failed with a vote of 32.96% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 10.60%; Alternative Resources – 5.39%; Publicly Owned Entity – 0%; and End User – 0%).

- **Mirant-2 Amendment:** The Committee considered and failed to approve a motion by Mirant to amend the main motion so as replace the last sentence in Section 4.B with the following:
  - B. Thereafter, CONE will be adjusted by a rolling five-year average of the Handy-Whitman Index of Public Utility Construction Costs for “Total Plant-All Steam Generation” for the North Atlantic Region in years when the Capacity Clearing Price is set administratively (e.g., by APR-1, APR-2, APR-3, or any applicable floor price).

The Mirant-2 Amendment failed with a vote of 29.54% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 10.60%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **NextEra-2 Amendment:** The Committee considered and failed to approve a motion by NextEra to amend the main motion so as to replace the first sentence in Section 4.B with the following:
  - B. For the Forward Capacity Auction associated with the 2013/2014 Capacity Commitment Period, the CONE will be based on the outcome of the CONE from the 2012/2013 Forward Capacity Auction (\$4.918/kW-month) adjusted by the rolling five-year average of the Handy-Whitman Index of Public Utility Construction Costs for “Total Plant-All Steam Generation” for the North Atlantic Region.

The NextEra-2 Amendment failed with a vote of 32.96% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 10.60%; Alternative Resources – 5.39%; Publicly Owned Entity – 0%; and End User – 0%).

- **★ Special Cone Provision “Friendly” Amendment:** The Committee by acclamation and the ISO agreed to revise Section 4C as follows:
  - i. In any round of the Forward Capacity Auction in which prices are below 0.80 times CONE or such other value as determined in the NEPOOL stakeholder process, whichever is greater, if any, any Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Resource (but not any Self-Supplied FCA Resource) may submit a Dynamic De-List Bid.
  - ii. The Internal Market Monitoring Unit will review each offer from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources below 0.75 times CONE or such other value as determined in the NEPOOL stakeholder process, whichever is greater, if any, to determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues other than capacity revenues.
- **Calpine-1 Amendment:** The Committee considered and failed to approve a motion by Calpine to amend the main motion so as to insert the following Section 6.A.ii and renumber the remaining subsections to reflect the insertion:
  - ii. Maine shall be modeled as two Capacity Zones (one zone north of the Orrington interface and another zone south of that interface).

The Calpine-1 Amendment failed with a vote of 17.37% in favor (Generation – 11.31%; Transmission – 0%; Supplier- 6.06%; Alternative Resources – 0%; Publicly Owned Entity – 0%; and End User – 0%).

- **PSEG/NRG-1 Amendment:** The Committee considered and failed to approve a motion by PSEG/NRG to amend the main motion so as to revise Section 6.B so that it reads as follows:
  - B. All Capacity Zones identified pursuant to Section 6.A will be modeled at all times. Capacity price separation will be allowed within potentially constrained Capacity Zones based on any or all of the following:
    - i. Permanent de-list bids or non-price retirement requests;
    - ii. De-list bids of any kind submitted by a supplier that is non-pivotal in the Capacity Zone;
    - iii. De-list bids of any kind submitted by a supplier with a 5% or less share of total qualified capacity in the Capacity Zone;
    - iv. De-list bids of any kind from a supplier with a single resource in the Capacity Zone; and
    - v. Static de-list bids reviewed by FERC.

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The PSEG/NRG-1 Amendment failed with a vote of 32.27% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 13.33%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **PSEG-1 Amendment:** The Committee considered and failed to approve a motion by PSEG to amend the main motion so as to revise Section 6.B so that it reads as follows:

B. The ISO will model a new Capacity Zone when the in-zone capacity plus import capability is equal to or less than 125% of the LSR for that zone. Capacity price separation will be allowed within potentially constrained Capacity Zones based on any or all of the following:

- i. Permanent de-list bids;
- ii. Non-pivotal supplier de-list bids of any kind;
- iii. De-list bids submitted from supplier with a 5% or less market share in the zone (even if supplier would be pivotal in the FCM);
- iv. De-list bids from single unit supplier if greater than 5%; and
- v. Static de-list bids reviewed by FERC.

The PSEG-1 Amendment failed with a vote of 32.27% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 13.33%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **NRG-1 Amendment:** The Committee considered and failed to approve a motion by NRG to amend the main motion so as to revise Section 6.B so that it reads as follows:

B. If a de-list bid or non-price retirement request is rejected for reliability reasons in any Forward Capacity Auction, the affected Capacity Zone shall be modeled in the Forward Capacity Auctions and Annual Reconfiguration Auctions associated with the subsequent three Capacity Commitment Periods. If a bilateral transaction is rejected for reliability reasons, the Capacity Zone containing the resource seeking to shed its obligation shall be modeled in the Forward Capacity Auctions and Annual Reconfiguration Auctions associated with the subsequent three Capacity Commitment Periods.

The NRG-1 Amendment failed with a vote of 32.27% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 13.33%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **NRG-2 Amendment:** The Committee considered and failed to approve a motion by NRG to amend the main motion so as to (i) revise Section 7.C.i so that it reads as follows:

- i. In performing this analysis the remaining system is assumed to have resources equal to the allocated share of the probabilistic ICR, or the amount of resources obligated to offer energy to the New England system for the Capacity Commitment Period in question, whichever is greater.;

(ii) Revise Section 7.E so that it reads as follows:

- E. The LSR will be determined for each potential zone as the higher of the amount needed to meet the LSR or the TSA requirement for that zone.;

(iii) Delete Sub-Section 7.E.iii in its entirety.; and

(iv) Revise Section 7.F so that it reads as follows:

- F. Since no zonal model is likely to be able to adequately reflect all potential local reliability issues, ISO shall retain the right to reject de-list bids and bilateral transactions for reliability reasons. Given the current market rules, which assign obligation to participate in the energy markets solely through receipt of a capacity supply obligation, ISO shall retain the right to analyze resource de-list bids and bilateral exchanges of capacity supply obligation and to reject those that endanger the reliability of the system.

The NRG-2 Amendment failed with a vote of 32.27% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 13.33%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **GDF-Suez-2 Amendment:** The Committee considered and failed to approve a motion by GDF-Suez to amend the main motion so as to revise Section 8 so that it reads as follows:

#### 8. Demand Resources.

- A. The issues regarding the rights and obligations applicable to Demand Resources in the Forward Capacity Market, including but not limited to obligations (e.g., participation in the energy markets as price-responsive demand), enforcement of performance obligations, and net payments, as well as applicability of Peak Energy Rent deductions, will be addressed in the NEPOOL Participant Processes. The following issues presented to the FCMWG regarding Demand Resources include (“Identified DR Issues”):

- i. Comparability in day ahead and real time energy market obligations (including monitoring and mitigation of operational constraints);
- ii. Comparability in the application of Peak Energy Rent deductions;

- iii. Reconstitution of coincident peak loads to reflect FCM-related DR activation;
  - iv. Comparable reliance on DR in long and short term system operations planning (including LTOCM and STOCM evaluations under OP5);
  - v. Comparable consequences for physical withholding (i.e., election to continue uninterrupted electric service); and
  - vi. Addressing required differences in capacity products through tiered FCA capacity products.
- B. The NEPOOL Participant Processes for the Identified DR Issues will be addressed in sufficient time to facilitate implementation for the fourth Commitment Period (FCA4).
- C. The ISO acknowledges that the Identified DR Issues are appropriately within the scope of issues identified in any interventions to ISO's Section 205 filing of changes arising from the Item 8.B discussions whether or not the changes address the respective Identified DR Issues.

The GDF-Suez-2 Amendment failed with a vote of 35.90% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 16.97%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **International Power-1 Amendment:** The Committee considered and failed to approve a motion by International Power so as to add the following new Section 11 on PER Proxy Units:

11. PER Proxy Unit.

- A. Section III.13.7.2.7.1.1.1(b) [of the ISO Tariff] states that “The PER Proxy Unit shall be indexed to the marginal fuel, which shall be the lower of ultra low-sulfur No. 2 oil measured at New York Harbor plus a seven percent markup for transportation or day-ahead gas measured at the Algonquin City Gate, as determined on a daily basis.” By definition, “marginal” should be the most expensive, not least expensive; this rule as written could force oil-burning plants to operate at a loss, even when they are on dispatch in the real-time market. Accordingly, the word “lower” shall be corrected to read “greater” in Section III.13.7.2.7.1.1.1(b) [of the ISO Tariff].

The International Power-1 Amendment failed with a vote of 31.99% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 13.05%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **International Power-2 Amendment:** The Committee considered and failed to approve a motion by International Power to amend the amended main motion so as to

rescind the changes to Section 7.F that were approved in the “Collective NGrid Amendment” and restore the Section 7.F language proposed by the ISO in the November 5 Draft of the FCMWG DBD. The International Power-2 Amendment failed with a vote of 35.90% in favor (Generation – 16.97%; Transmission – 0%; Supplier- 16.97%; Alternative Resources – 1.97%; Publicly Owned Entity – 0%; and End User – 0%).

- **MPUC-1 Amendment:** The Committee considered and failed to approve a motion proposed by the Maine Public Utilities Commission (“MPUC”) and moved by Bangor Hydro to add the following new section to sunset Sections 1 and 2 of the FCMWG DBD.

11. Sunset Provision for Sections 1 and 2.

All Market Rules that are accepted or approved by the Federal Energy Regulatory Commission that implement Sections 1 and 2 of this design basis document shall expire at the conclusion of the Sixth Forward Capacity Auction associated with the 2016/2017 Capacity Commitment Period. Further recommendation to continue in the interim, and starting immediately, the existing process of analyzing and modifying the provisions in Sections 1 and 2. This analysis will include ISO making its best efforts to estimate the costs and benefits of potential changes.

The MPUC-1 Amendment failed with a vote of 25.85% in favor (Generation – 0%; Transmission – 11.31%; Supplier- 0%; Alternative Resources – 0%; Publicly Owned Entity – 0%; and End User – 14.54%).

- **Vote on Main Motion:** The main motion, as amended by the four amendments identified above with the “☛” symbol, was then voted and passed with a vote of 69.06% in favor (Generation – 0%; Transmission – 16.97%; Supplier – 2.99%; Alternative Resources – 15.17%; Publicly Owned Entity – 16.97%; and End User – 16.97%). A copy of the DBD as amended and voted is included as ***Attachment A*** of this Notice.
- **Vote on FCMWG DBD without NGrid-1 and -2 Amendments:** Pursuant to Section 11.1.3 of the Participants Agreement, the Committee also voted at the request of the ISO a motion to support the FCMWG DBD without the NGrid-1 Amendment (Collective NGrid Amendment) and the NGrid-2 Amendment (Stand-Alone Amendment), but with the Mirant and Special Cone Provision “Friendly” Amendments. The motion failed with a vote of 3.64% in favor (Generation – 0%; Transmission – 0%; Supplier – 3.64%; Alternative Resources – 0%; Publicly Owned Entity – 0%; and End User – 0%). A copy of the DBD as proposed by the ISO and voted is included as ***Attachment B*** of this Notice.

**Forward Capacity Market  
Design Basis Document  
FCM DBD AS APPROVED BY PARTICIPANTS COMMITTEE**

*Capitalized terms used but not defined in this Design Basis Document are intended to have the meanings given to such terms in the ISO New England Inc. Transmission, Markets, and Services Tariff. “COST of New Entry” or “CONE” is defined in Market Rule 1.*

**1. Alternative Price Rule (APR) Trigger and Pricing Mechanism.**

**A. General Provisions**

i. Overview. There will be three distinct Alternative Price Rule (“APR”) triggers in the revised FCM rules, referred to below as APR-1, APR-2, and APR-3:

(1) APR-1 is a slightly revised version of the Alternative Price Rule as it currently exists in the FCM rules, which applies where new capacity is required. The pricing provisions in the currently-effective Alternative Price Rule will apply without change when APR-1 is triggered.

(2) APR-2 is a new trigger that will apply where no new capacity is required, and is designed to account for past excess out-of-market capacity, as described in the INTMMU Report and discussed among the FCMWG. The pricing provisions in the currently-effective Alternative Price Rule will apply without change when APR-2 is triggered.

(3) APR-3 is a new trigger that will apply where no new capacity is required, and is designed to account for rejected de-list bids, an issue identified in the development of the original FCM rules, which must be addressed in a filing with FERC by May 17, 2010 (pursuant to Section III.13.2.5.2.5(f)) and which has been discussed among the FCMWG.

ii. General Pricing Rule. A general rule will be included in the revised FCM rules stating that in no case will the application of any of the three APR mechanisms result in lowering the Capacity Clearing Price that otherwise results from the Forward Capacity Auction.

iii. The three APR mechanisms are non-overlapping, such that only one of the APR mechanisms could be triggered in each Capacity Zone in any FCA.

**B. APR-1**. This is a slightly revised version of the Alternative Price Rule as it currently exists in the FCM rules. Changes to the current rule are shown in **red text**.

i. Trigger. APR-1 is triggered if in a Capacity Zone, all of the following conditions are met:

- (1) (New Capacity Required + Cleared Permanent De-List Bids) > 0;
  - (2) there is not Inadequate Supply; and
  - (3) Out-of-Market Capacity > (New Capacity Required + Cleared Permanent De-List Bids).
- ii. Pricing. No change to the pricing provisions in the current Alternative Price Rule. If APR-1 is triggered in a Capacity Zone, then the Capacity Clearing Price in that Capacity Zone shall be, generally, the lesser of: (a) \$0.01 below the price at which the last new resource that is not Out-of-Market Capacity to withdraw did so; or (b) CONE.
- iii. Definitions.
- (1) New Capacity Required. No change to the definition of New Capacity Required as it exists in the current FCM rules, at Section III.13.2.4(b)(i). (Note that in the definition of New Capacity Required, at Section III.13.2.4(b)(i), existing MWs associated with accepted Non-Price Retirement Requests have been excluded from the total quantity of existing capacity.) (Also note that New Capacity Required can be a negative value.)
  - (2) Cleared Permanent De-List Bids. The MW quantity of Permanent De-List Bids clearing in the instant FCA.
  - (3) Inadequate Supply. No change to the definition of Inadequate Supply as it exists in the current FCM rules, at Section III.13.2.8.1.
  - (4) Out-of-Market Capacity. The amount of Out-of-Market Capacity shall be the sum of the amounts listed below. Three of these amounts are unchanged from the current FCM rules; the fourth is an additional source of Out-of-Market Capacity.
    - (a) ISO RFPs. No change to the definition of ISO RFPs as it exists in the current FCM rules, at Section III.13.2.7.8.2(b)(i).
    - (b) Certain New Capacity Offers. No change to the definition of Certain New Capacity Offers as it exists in the current FCM rules, at Section III.13.2.7.8.2(b)(ii).
    - (c) New Self-Supplied FCA Resources. No change to the definition of New Self-Supplied FCA Resources as it exists in the current FCM rules, at Section III.13.2.7.8.2(b)(iii).
    - (d) 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 instant FCA will be included in the calculation of Out-of-Market Capacity.

C. **APR-2.** This is a new trigger that will cover situations where no new capacity is required, and is designed to account for past excess out-of-market capacity. These provisions will be entirely new in the FCM rules, and so nothing below is shown in red versus black text. Note that New Capacity Required can be a negative value.

i. Trigger. APR-2 is triggered if in a Capacity Zone, all of the following conditions are met:

(1)  $(\text{New Capacity Required} + \text{Cleared Permanent De-List Bids}) \leq 0$ ;

(2) there is not Inadequate Supply; and

(3)  $(\text{New Capacity Required} + \text{Cleared Permanent De-List Bids} + \text{Carried Forward Excess OOM Capacity}) > 0$ .

ii. Pricing. Same pricing provisions as the current Alternative Price Rule. If APR-2 is triggered in a Capacity Zone, then the Capacity Clearing Price in that Capacity Zone shall be, generally, the lesser of: (a) \$0.01 below the price at which the last new resource that is not Out-of-Market Capacity to withdraw did so; or (b) CONE.

iii. Definitions. All definitions are the same as those discussed above in description of APR-1, except for Carried Forward Excess OOM Capacity, which is a new term introduced for use in determining whether APR-2 is triggered.

(1) Carried Forward Excess OOM Capacity. Values associated with the instant FCA are denoted with a subscript “t” and values associated with the immediately previous FCA are denoted with a subscript “t-1”. In no case will Carried Forward Excess OOM Capacity be less than zero.

(a) If  $(\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1}) > 0$ , then  $\text{Carried Forward Excess OOM Capacity}_t = \text{Out-of-Market Capacity}_{t-1} - (\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1})$ .

(b) If  $(\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1}) \leq 0$ , then  $\text{Carried Forward Excess OOM Capacity}_t = \text{Out-of-Market Capacity}_{t-1} + \min[\text{Carried Forward Excess OOM Capacity}_{t-1}, (0 - (\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1}))]$

In the calculation of Carried Forward Excess OOM Capacity, past excess Out-of-Market Capacity shall not carry forward for more than four years (hence it will apply in no more than five auctions). The amount of Carried Forward Excess OOM Capacity associated with the 2010/2011, 2011/2012, and 2012/2013 Capacity Commitment Periods shall be considered zero.

D. **APR-3.** This is a new mechanism that will apply where no new capacity is required and where APR-2 does not apply, and is designed to account for rejected de-list bids. These provisions will be entirely new in the FCM rules, and so nothing is shown in red versus black text.

i. Trigger. APR-3 is triggered if in a Capacity Zone, all of the following conditions are met:

(1) (New Capacity Required + Cleared Permanent De-List Bids)  $\leq$  0;

(2) (New Capacity Required + Cleared Permanent De-List Bids + Carried Forward Excess OOM Capacity)  $\leq$  0;

(3) there is not Inadequate Supply; and

(4) 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 for reliability reasons pursuant to Section III.13.2.5.2.5.

ii. Pricing. At FCA prices at or below 0.6 times CONE, if APR-3 is triggered in a Capacity Zone, 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 at which the trigger condition (described below) is met multiplied by the quantity demanded at that price. The trigger condition shall be when the excess capacity remaining in the FCA 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. (Note that this pricing provision will not be applied in FCAs for which there is a floor price as described in Section 3.A below.)

iii. Definitions. All definitions are the same as those discussed above.

## 2. Certain New Capacity Offers and New Import Capacity Offers.

A. *[Deleted]*

B. Section III.13.1.1.2.6 states that the INTMMU “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.” “[E]xpected 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.

i. Expected net revenues excludes revenues that are available only to a particular resource or set of resources, revenues that are only for New but not Existing resources, and revenues from sources that are not tradable. Such revenues also excludes, without limitation, revenues from contracts pursuant to state RFP

- arrangements that are exclusive to the contract holder and are not tradable property rights, system benefit charge expenditures that are not widely available, and revenues from power purchase agreements in which the capacity value has already been embedded.
- ii. Expected net revenues includes revenues that are available to all resources or resources of a particular type. Such revenues include, without limitation, items such as production tax credits or investment tax credits that are available only to new renewable resources or property tax abatements or credits unless they are demonstrated not to be available to all resources. Such revenues include revenues that are derived from tradable sources. Such revenues include, without limitation, revenues from items such as RECs available to all renewable resources or CO2 emission allowance endowments available generally to new resources.
- C. Stakeholders will consider in the NEPOOL Participant Process changes to Section III.13.8.1 (“Filing of Certain Determinations Made By the ISO Prior to the Forward Capacity Auction and Challenges Thereto”) that would require reporting of certain information regarding offers from new resources submitted at prices below 0.75 times CONE. Such reporting could include an explanation of the reasons for categorizing capacity as out-of-market and in-market and, to the extent possible, identifying the components of the offer which were deemed out-of-market and in-market and components of the bid which not deemed out-of-market.

### 3. Pricing Agreements.

- A. For the Forward Capacity Auctions associated with the 2013/2014, 2014/2015, and 2015/2016 Capacity Commitment Periods, there shall be a floor price of 0.6 times CONE and a price ceiling of 1.4 times CONE, with CONE as described in Section 4.B below.<sup>1</sup>
- B. If the Forward Capacity Auction stops at the floor price for that auction and the capacity remaining in the auction at that time exceeds the Installed Capacity Requirement relevant to that auction, individual resources may choose to either (1) pro rate its cleared MWs and be paid the full floor price for that auction or (2) leave its cleared MWs to take on a capacity supply obligation but have its payments prorated. Options (1) and (2) above shall be administered in manner consistent with the current provisions of Section III.13.2.7.3(b). Market Rules, if any, to address the compensation for individual resources that have been denied for reliability reasons the ability to pro rate their cleared MWs will be addressed in the NEPOOL Participant Processes.

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<sup>1</sup> Please note that, as indicated at the meeting, the drafters made revisions to the NGrid-1 Amendment to more closely mirror the ISO proposal in Sections 3.A and 4B without substantively altering the NGrid-1 Amendment.

**4. Cost of New Entry (“CONE”) Readjustments.**

- A. Starting with the Forward Capacity Auction associated with the 2013/2014 Capacity Commitment Period, each Capacity Zone modeled in a Forward Capacity Auction shall have a Forward Capacity Auction Starting Price equal to \$15/kW-month, which shall be adjusted annually using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs, or higher if deemed appropriate by the ISO.
- B. For the Forward Capacity Auction associated with the 2013/2014 Capacity Commitment Period, CONE shall be \$4.92/kW-month, resulting in a floor price of \$2.95/kW-month and a ceiling price of \$6.89/kW-month. Thereafter, CONE will be adjusted by a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs in years when it is not updated by new entry.
- C. Special CONE Provisions
  - i. In any round of the Forward Capacity Auction in which prices are below 0.80 times CONE or such other value as determined in the NEPOOL stakeholder process, whichever is greater, if any, any Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Resource (but not any Self-Supplied FCA Resource) may submit a Dynamic De-List Bid.
  - ii. The Internal Market Monitoring Unit will review each offer from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources below 0.75 times CONE or such other value as determined in the NEPOOL stakeholder process, whichever is greater, if any, to determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues other than capacity revenues.

**5. Price Guarantee.**

- A. A New Generating Capacity Resource and a New Demand Resource may elect, during the qualification process, to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that clears in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to five (5) to ten (10) additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only, with the exact number of Capacity Commitment Periods to be further discussed in the NEPOOL Participant Process.

## 6. Capacity Zones.<sup>2</sup>

- A. Except as noted below, modeled Capacity Zones will be the same as the existing energy market zones.
- i. To accommodate the clearing order mechanics of the descending clock Forward Capacity Auction, the modeled Rest-of-Pool Capacity Zone will comprise the New Hampshire zone and the Western Massachusetts zone.
  - ii. Prior to developing local (zonal) capacity requirements (described in Section 7 below), transfer limits must be calculated between each modeled Capacity Zone and the adjacent modeled Capacity Zone (consistent with the clearing order). In the event a discrete transfer limit cannot be determined, which could result from multiple interconnections between zones, the modeled Capacity Zone with the indeterminate limit will be consolidated into the modeled Rest-of-Pool Capacity Zone.
  - iii. In the event transmission limitations develop such that intra-zonal constraints must be modeled in the FCM, any necessary subdivision of an energy zone into one or more modeled Capacity Zones will respect the energy zone boundaries and, to the extent possible, the state retail electric service territories.
  - iv. To maintain modeled Capacity Zone stability, modeled Capacity Zones will only be modified in response to material changes in system topology that significantly impact capacity resource substitutability. A system topology change that causes interface limits to change by a significant amount should trigger a review of the modeled Capacity Zones.
- B. Permanent De-List Bids and Non-Price Retirement Requests will be allowed to trigger modeling of and price formation in the Capacity Zones.
- C. The ISO will provide notice of any change to modeled Capacity Zones prior to the qualification deadline for each annual FCA.

## 7. Local (Zonal) Capacity Requirement.

- A. The Installed Capacity Requirement (ICR) used to determine the procurement of capacity in the FCM will continue to be set based on the probabilistic resource adequacy criterion of 1 day in ten years loss of load expectation (0.1 day/yr. LOLE).

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<sup>2</sup> Note that certain items in Sections 6 and 7 have been addressed by the Reliability Committee at its October 22, 2009 meeting (notice of actions has been posted with the FCMWG October 23 meeting materials). In addition, note that the FCMWG Design Basis Document does not include certain related issues such as: Tie Benefits (see Reliability Committee Issues List, Issue 1) and Reliability Review Criteria (see Reliability Committee Issues List, Issue 2).

- B. Local requirements shall be calculated for each potential zone identified in the zonal formation process. For the purposes of this Design Basis Document, the following term definitions shall apply:
- i. Local Resource Adequacy Requirement (LRA) shall refer to the local zonal capacity requirement calculated using probabilistic modeling techniques focused on ensuring the zone meets the one-day-in-ten reliability standard.
  - ii. Transmission Security Analysis (TSA) shall refer to the local zonal capacity requirement calculated using deterministic transmission load flow analyses focused on ensuring the zone will have sufficient resources to securely operate the transmission system following selected contingency events.
  - iii. Local Sourcing Requirement (LSR) shall refer to the quantity purchased in the Forward Capacity Market on behalf of the zones modeled in that market.
  - iv. For each potential zone, both a LRA and a TSA requirement shall be calculated.
- C. The analyses in support of the development of the LRA requirements are probabilistic, in which proxy units are removed from the potential capacity zone in question to determine the minimum amount of capacity which must be located in the potential zone to meet the one-day-in-ten standard.
- i. In an effort to find the proper balance between additional reliability and additional capacity market costs for consumers, recognizing that the probability that some amount of the remaining interconnected resources will still be offering into the energy market is certainly not zero, the calculation of the probabilistic local RA requirement/LSR will include and recognize the reliability contribution expected from some amount of the remaining interconnected resources. Initially, such amount will be zero. After the completion of the first two Capacity Commitment Periods, (and then after each subsequent commitment period), based on the actual demonstrated offers into the energy market, the ISO shall update the initial amount assumed to properly reflect in the calculation of the probabilistic local RA requirement the reliability contribution of interconnected de-listed/surplus capacity.
- D. The TSA requirement for each potential capacity zone shall be developed through a series of transmission load flow studies targeted at determination of the performance of the system under stressed conditions, and development of a resource requirement sufficient to allow the system to operate through the stressed situation.
- i. The TSA shall be calculated at the level of the identified potential Capacity Zones.
  - ii. While the TSA for each potential capacity zone shall 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 simply by summing to the TSA amount.

- E. Set the zonal local purchase for constrained zones equal to the higher of the zonal probabilistic RA requirement and the zonal TSA. However, to the extent the zonal Transmission Security Analysis requirement continues to exceed the Resource Adequacy requirement (i.e., the 1 in 10 LOLE criteria), the ISO commits to work with stakeholders to implement, as appropriate, any alternative solutions (e.g., enhancements to the Locational Forward Reserve Markets, DR solutions, enhancements to the Regional System Planning process; etc.) which might prove more effective and efficient for the markets and customers in the long-run.
- i. In the event a potential zone or zones fail the test for modeling in the FCA and are aggregated into a larger Rest-of-Pool zone, the FCM purchase requirement for the resulting Rest-of-Pool Zone shall equal the sum of the total share of ICR allocated to each of the zones making up the Rest-of-Pool zone.
  - ii. Notwithstanding aggregation into the Rest-of-Pool Zone, both the LRA and TSA requirements of any identified potential zone must still be met, and this requirement shall be met prior to the commitment period in question through rejection of de-list bids and/or subsequent bilateral trades of capacity obligation.
  - iii. In the event operational obligations are assigned to resources through means other than the receipt of a capacity supply obligation, the higher-of requirement could be dropped from the local capacity requirement set in the FCM market. In that event, the LSR would be set equal to the LRA of the zone. This statement affirms that both RA and TSA needs must be met with obligated resources by the start of the relevant FCM commitment period.
- F. Resources without a Capacity Supply Obligation, to the extent they are available to the ISO to provide energy, shall be obligated to provide energy if requested by the ISO to address and/or avoid an emergency after the ISO has called on all resources with a Capacity Supply Obligation. More detail will be needed on compensation to the resource for providing energy. The relevant sections of the Market Rules are III.13.6.2.1.1. and III.13.6.4.
- G. Enhance the Regional System Plan Process to consider:
- i. The impact of proposed transmission topology changes on zonal configuration and requirements.
  - ii. Identification of emerging issues that may require changes in zonal configuration.
  - iii. Identification of effective solutions to local security and reliability needs.
  - iv. Projections of zonal configurations under alternate expansion strategies.

**8. Demand Resources.**

- A. The issues regarding the rights and obligations applicable to Demand Resources in the Forward Capacity Market, including but not limited to obligations (e.g., participation in the energy markets as price-responsive demand), enforcement of performance obligations, and net payments, as well as applicability of Peak Energy Rent deductions, will be addressed in the NEPOOL Participant Processes.

**9. Permitting Greater Competition between New Internal Generating Resources and Imports.**

- A. Under existing rules, new, commercial internal generating capacity cannot use the interconnection space currently set aside for capacity imports including situations where the interconnection space would otherwise go unused for the Commitment Period. Changes to the Forward Capacity Market design will be considered through the stakeholder process to permit use of the overlapping import interconnection space that is currently set aside for imports by both imports and new internal generators (including the ability for new internal generators to qualify for Forward Capacity Market sales using interconnection space that would otherwise be left unused).

**10. Import Capacity Resources.**

- A. The issues presented to the FCMWG regarding Import Capacity Resources include: (i) enhancement of the capability of an Import Capacity Resource to acquire a Capacity Supply Obligations from an Import Capacity Resource that cleared on another interface and/or from an internal Capacity Resources and (ii) allow for capacity wheel-through where ISO New England acts as the intervening control area e.g. a transaction from the Québec Control Area that flows across ISO New England and sinks into the New York ISO.
- B. The issues identified in 10(A) will be addressed in the NEPOOL stakeholder process.

**Forward Capacity Market  
Design Basis Document  
ISO PROPOSED FCM DBD AS VOTED BY THE PARTICIPANTS COMMITTEE**

*Capitalized terms used but not defined in this Design Basis Document are intended to have the meanings given to such terms in the ISO New England Inc. Transmission, Markets, and Services Tariff. “COST of New Entry” or “CONE” is defined in Market Rule 1.*

**1. Alternative Price Rule (APR) Trigger and Pricing Mechanism.**

A. General Provisions

i. Overview. There will be three distinct Alternative Price Rule (“APR”) triggers in the revised FCM rules, referred to below as APR-1, APR-2, and APR-3:

(1) APR-1 is a slightly revised version of the Alternative Price Rule as it currently exists in the FCM rules, which applies where new capacity is required. The pricing provisions in the currently-effective Alternative Price Rule will apply without change when APR-1 is triggered.

(2) APR-2 is a new trigger that will apply where no new capacity is required, and is designed to account for past excess out-of-market capacity, as described in the INTMMU Report and discussed among the FCMWG. The pricing provisions in the currently-effective Alternative Price Rule will apply without change when APR-2 is triggered.

(3) APR-3 is a new trigger that will apply where no new capacity is required, and is designed to account for rejected de-list bids, an issue identified in the development of the original FCM rules, which must be addressed in a filing with FERC by May 17, 2010 (pursuant to Section III.13.2.5.2.5(f)) and which has been discussed among the FCMWG.

ii. General Pricing Rule. A general rule will be included in the revised FCM rules stating that in no case will the application of any of the three APR mechanisms result in lowering the Capacity Clearing Price that otherwise results from the Forward Capacity Auction.

iii. The three APR mechanisms are non-overlapping, such that only one of the APR mechanisms could be triggered in each Capacity Zone in any FCA.

B. **APR-1**. This is a slightly revised version of the Alternative Price Rule as it currently exists in the FCM rules. Changes to the current rule are shown in **red text**.

i. Trigger. APR-1 is triggered if in a Capacity Zone, all of the following conditions are met:

- (1) (New Capacity Required + Cleared Permanent De-List Bids) > 0;
  - (2) there is not Inadequate Supply; and
  - (3) Out-of-Market Capacity > (New Capacity Required + Cleared Permanent De-List Bids).
- ii. Pricing. No change to the pricing provisions in the current Alternative Price Rule. If APR-1 is triggered in a Capacity Zone, then the Capacity Clearing Price in that Capacity Zone shall be, generally, the lesser of: (a) \$0.01 below the price at which the last new resource that is not Out-of-Market Capacity to withdraw did so; or (b) CONE.
- iii. Definitions.
- (1) New Capacity Required. No change to the definition of New Capacity Required as it exists in the current FCM rules, at Section III.13.2.4(b)(i). (Note that in the definition of New Capacity Required, at Section III.13.2.4(b)(i), existing MWs associated with accepted Non-Price Retirement Requests have been excluded from the total quantity of existing capacity.) (Also note that New Capacity Required can be a negative value.)
  - (2) Cleared Permanent De-List Bids. The MW quantity of Permanent De-List Bids clearing in the instant FCA.
  - (3) Inadequate Supply. No change to the definition of Inadequate Supply as it exists in the current FCM rules, at Section III.13.2.8.1.
  - (4) Out-of-Market Capacity. The amount of Out-of-Market Capacity shall be the sum of the amounts listed below. Three of these amounts are unchanged from the current FCM rules; the fourth is an additional source of Out-of-Market Capacity.
    - (a) ISO RFPs. No change to the definition of ISO RFPs as it exists in the current FCM rules, at Section III.13.2.7.8.2(b)(i).
    - (b) Certain New Capacity Offers. No change to the definition of Certain New Capacity Offers as it exists in the current FCM rules, at Section III.13.2.7.8.2(b)(ii).
    - (c) New Self-Supplied FCA Resources. No change to the definition of New Self-Supplied FCA Resources as it exists in the current FCM rules, at Section III.13.2.7.8.2(b)(iii).
    - (d) 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 instant FCA will be included in the calculation of Out-of-Market Capacity.

C. **APR-2.** This is a new trigger that will cover situations where no new capacity is required, and is designed to account for past excess out-of-market capacity. These provisions will be entirely new in the FCM rules, and so nothing below is shown in red versus black text. Note that New Capacity Required can be a negative value.

i. Trigger. APR-2 is triggered if in a Capacity Zone, all of the following conditions are met:

(1)  $(\text{New Capacity Required} + \text{Cleared Permanent De-List Bids}) \leq 0$ ;

(2) there is not Inadequate Supply; and

(3)  $(\text{New Capacity Required} + \text{Cleared Permanent De-List Bids} + \text{Carried Forward Excess OOM Capacity}) > 0$ .

ii. Pricing. Same pricing provisions as the current Alternative Price Rule. If APR-2 is triggered in a Capacity Zone, then the Capacity Clearing Price in that Capacity Zone shall be, generally, the lesser of: (a) \$0.01 below the price at which the last new resource that is not Out-of-Market Capacity to withdraw did so; or (b) CONE.

iii. Definitions. All definitions are the same as those discussed above in description of APR-1, except for Carried Forward Excess OOM Capacity, which is a new term introduced for use in determining whether APR-2 is triggered.

(1) Carried Forward Excess OOM Capacity. Values associated with the instant FCA are denoted with a subscript “t” and values associated with the immediately previous FCA are denoted with a subscript “t-1”. In no case will Carried Forward Excess OOM Capacity be less than zero.

(a) If  $(\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1}) > 0$ , then  $\text{Carried Forward Excess OOM Capacity}_t = \text{Out-of-Market Capacity}_{t-1} - (\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1})$ .

(b) If  $(\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1}) \leq 0$ , then  $\text{Carried Forward Excess OOM Capacity}_t = \text{Out-of-Market Capacity}_{t-1} + \min[\text{Carried Forward Excess OOM Capacity}_{t-1}, (0 - (\text{New Capacity Required}_{t-1} + \text{Cleared Permanent De-List Bids}_{t-1}))]$

In the calculation of Carried Forward Excess OOM Capacity, past excess Out-of-Market Capacity shall not carry forward for more than four years (hence it will apply in no more than five auctions). The amount of Carried Forward Excess OOM Capacity associated with the 2010/2011, 2011/2012, and 2012/2013 Capacity Commitment Periods shall be considered zero.

D. **APR-3.** This is a new mechanism that will apply where no new capacity is required and where APR-2 does not apply, and is designed to account for rejected de-list bids. These provisions will be entirely new in the FCM rules, and so nothing is shown in red versus black text.

i. Trigger. APR-3 is triggered if in a Capacity Zone, all of the following conditions are met:

(1) (New Capacity Required + Cleared Permanent De-List Bids)  $\leq$  0;

(2) (New Capacity Required + Cleared Permanent De-List Bids + Carried Forward Excess OOM Capacity)  $\leq$  0;

(3) there is not Inadequate Supply; and

(4) 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 for reliability reasons pursuant to Section III.13.2.5.2.5.

ii. Pricing. At FCA prices at or below 0.6 times CONE, if APR-3 is triggered in a Capacity Zone, 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 at which the trigger condition (described below) is met multiplied by the quantity demanded at that price. The trigger condition shall be when the excess capacity remaining in the FCA 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. (Note that this pricing provision will not be applied in FCAs for which there is a floor price as described in Section 3.A below.)

iii. Definitions. All definitions are the same as those discussed above.

## 2. Certain New Capacity Offers and New Import Capacity Offers.

A. *[Deleted]*

B. Section III.13.1.1.2.6 states that the INTMMU “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.” “[E]xpected 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.

i. Expected net revenues excludes revenues that are available only to a particular resource or set of resources, revenues that are only for New but not Existing resources, and revenues from sources that are not tradable. Such revenues also

- excludes, without limitation, revenues from contracts pursuant to state RFP arrangements that are exclusive to the contract holder and are not tradable property rights, system benefit charge expenditures that are not widely available, and revenues from power purchase agreements in which the capacity value has already been embedded.
- ii. Expected net revenues includes revenues that are available to all resources or resources of a particular type. Such revenues include, without limitation, items such as production tax credits or investment tax credits that are available only to new renewable resources or property tax abatements or credits unless they are demonstrated not to be available to all resources. Such revenues include revenues that are derived from tradable sources. Such revenues include, without limitation, revenues from items such as RECs available to all renewable resources or CO2 emission allowance endowments available generally to new resources.
- C. Stakeholders will consider in the NEPOOL Participant Process changes to Section III.13.8.1 (“Filing of Certain Determinations Made By the ISO Prior to the Forward Capacity Auction and Challenges Thereto”) that would require reporting of certain information regarding offers from new resources submitted at prices below 0.75 times CONE. Such reporting could include an explanation of the reasons for categorizing capacity as out-of-market and in-market and, to the extent possible, identifying the components of the offer which were deemed out-of-market and in-market and components of the bid which not deemed out-of-market.

### **3. Pricing Agreements.**

- A. For the Forward Capacity Auctions associated with the 2013/2014, 2014/2015, and 2015/2016 Capacity Commitment Periods, there shall be a floor price of 0.6 times CONE, with CONE as described in Section 4.B below.
- B. If the Forward Capacity Auction stops and the capacity remaining in the auction at that time exceeds the ICR relevant to that auction, payments to individual 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). Resources will not have the option of prorating their cleared MWs after the Forward Capacity Auctions associated with the 2013/2014, 2014/2015, and 2015/2016 Capacity Commitment Periods. ISO will investigate whether it can allow resources to de-list below the floor price of 0.6 times CONE prior to determining the Capacity Clearing Price and if it can do so, it will allow such submittals, otherwise, ISO will permit resources to prorate their cleared MWs consistent with the rules governing such prorating in Market Rule 1 effective as of the date of this Design Basis Document until such time as it is able to allow resources to de-list below the floor price of 0.6 times CONE prior to determining the Capacity Clearing Price.

**4. Cost of New Entry (“CONE”) Readjustments.**

- A. Starting with the Forward Capacity Auction associated with the 2013/2014 Capacity Commitment Period, each Capacity Zone modeled in a Forward Capacity Auction shall have a Forward Capacity Auction Starting Price equal to \$15/kW-month, which shall be adjusted annually using a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs, or higher if deemed appropriate by the ISO.
- B. For the Forward Capacity Auction associated with the 2013/2014 Capacity Commitment Period, CONE shall be \$4.918/kW-month. Thereafter, CONE will be adjusted by a rolling three-year average of the Handy-Whitman Index of Public Utility Construction Costs in years when the Capacity Clearing Price is set administratively (e.g., by APR-1, APR-2, APR-3, or any applicable floor price).
- C. Special CONE Provisions
  - i. In any round of the Forward Capacity Auction in which prices are below 0.80 times CONE or such other value as determined in the NEPOOL stakeholder process, whichever is greater, if any, any Existing Generating Capacity Resource, Existing Import Capacity Resource, or Existing Demand Resource (but not any Self-Supplied FCA Resource) may submit a Dynamic De-List Bid.
  - ii. The Internal Market Monitoring Unit will review each offer from New Generating Capacity Resources, New Import Capacity Resources, and New Demand Resources below 0.75 times CONE or such other value as determined in the NEPOOL stakeholder process, whichever is greater, if any, to determine whether the offer is consistent with the long run average costs of that resource net of expected net revenues other than capacity revenues.

**5. Price Guarantee.**

- A. A New Generating Capacity Resource and a New Demand Resource may elect, during the qualification process, to have the Capacity Supply Obligation and the Capacity Clearing Price applicable to an offer that clears in the Forward Capacity Auction continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to five (5) to ten (10) additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only, with the exact number of Capacity Commitment Periods to be further discussed in the NEPOOL Participant Process.

**6. Capacity Zones.<sup>1</sup>**

- A. Except as noted below, modeled Capacity Zones will be the same as the existing energy market zones.
  - i. To accommodate the clearing order mechanics of the descending clock Forward Capacity Auction, the modeled Rest-of-Pool Capacity Zone will comprise the New Hampshire zone and the Western Massachusetts zone.
  - ii. Prior to developing local (zonal) capacity requirements (described in Section 7 below), transfer limits must be calculated between each modeled Capacity Zone and the adjacent modeled Capacity Zone (consistent with the clearing order). In the event a discrete transfer limit cannot be determined, which could result from multiple interconnections between zones, the modeled Capacity Zone with the indeterminate limit will be consolidated into the modeled Rest-of-Pool Capacity Zone.
  - iii. In the event transmission limitations develop such that intra-zonal constraints must be modeled in the FCM, any necessary subdivision of an energy zone into one or more modeled Capacity Zones will respect the energy zone boundaries and, to the extent possible, the state retail electric service territories.
  - iv. To maintain modeled Capacity Zone stability, modeled Capacity Zones will only be modified in response to material changes in system topology that significantly impact capacity resource substitutability. A system topology change that causes interface limits to change by a significant amount should trigger a review of the modeled Capacity Zones.
- B. Permanent de-list bids, static de-list bids from non-pivotal suppliers, and Non-Price Retirement Requests will be allowed to trigger modeling of and price formation in the Capacity Zones.
- C. The ISO will provide notice of any change to modeled Capacity Zones prior to the qualification deadline for each annual FCA.

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<sup>1</sup> Note that certain items in Sections 6 and 7 have been addressed by the Reliability Committee at its October 22, 2009 meeting (notice of actions has been posted with the FCMWG October 23 meeting materials). In addition, note that the FCMWG Design Basis Document does not include certain related issues such as: Tie Benefits (see Reliability Committee Issues List, Issue 1) and Reliability Review Criteria (see Reliability Committee Issues List, Issue 2).

**7. Local (Zonal) Capacity Requirement.**

- A. The Installed Capacity Requirement (ICR) used to determine the procurement of capacity in the FCM will continue to be set based on the probabilistic resource adequacy criterion of 1 day in ten years loss of load expectation (0.1day/yr. LOLE).
- B. Local requirements shall be calculated for each potential zone identified in the zonal formation process. For the purposes of this Design Basis Document, the following term definitions shall apply:
  - i. Local Resource Adequacy Requirement (LRA) shall refer to the local zonal capacity requirement calculated using probabilistic modeling techniques focused on ensuring the zone meets the one-day-in-ten reliability standard.
  - ii. Transmission Security Analysis (TSA) shall refer to the local zonal capacity requirement calculated using deterministic transmission load flow analyses focused on ensuring the zone will have sufficient resources to securely operate the transmission system following selected contingency events.
  - iii. Local Sourcing Requirement (LSR) shall refer to the quantity purchased in the Forward Capacity Market on behalf of the zones modeled in that market.
  - iv. For each potential zone, both a LRA and a TSA requirement shall be calculated.
- C. The analyses in support of the development of the LRA requirements are probabilistic, in which proxy units are removed from the potential capacity zone in question to determine the minimum amount of capacity which must be located in the potential zone to meet the one-day-in-ten standard.
  - i. In performing this analysis the remaining system is assumed to have resources equal to the allocated share of the probabilistic ICR, or the amount of resources obligated to offer energy to the New England system for the Capacity Commitment Period in question, whichever is greater. Notwithstanding the above, ISO will re-evaluate the LRA calculation based on actual participation of un-obligated resources in the energy markets during the first three Capacity Commitment Periods.
- D. The TSA requirement for each potential capacity zone shall be developed through a series of transmission load flow studies targeted at determination of the performance of the system under stressed conditions, and development of a resource requirement sufficient to allow the system to operate through the stressed situation.
  - i. The TSA shall be calculated at the level of the identified potential Capacity Zones.
  - ii. While the TSA for each potential capacity zone shall 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 simply by summing to the TSA amount.
- E. The LSR will be determined for each potential zone as the higher of the amount needed to meet the LRA or the TSA requirement for that zone.
- i. In the event a potential zone or zones fail the test for modeling in the FCA and are aggregated into a larger Rest-of-Pool zone, the FCM purchase requirement for the resulting Rest-of-Pool Zone shall equal the sum of the total share of ICR allocated to each of the zones making up the Rest-of-Pool zone.
  - ii. Notwithstanding aggregation into the Rest-of-Pool Zone, both the LRA and TSA requirements of any identified potential zone must still be met, and this requirement shall be met prior to the commitment period in question through rejection of de-list bids and/or subsequent bilateral trades of capacity obligation.
  - iii. In the event operational obligations are assigned to resources through means other than the receipt of a capacity supply obligation, the higher-of requirement could be dropped from the local capacity requirement set in the FCM market. In that event, the LSR would be set equal to the LRA of the zone. This statement affirms that both RA and TSA needs must be met with obligated resources by the start of the relevant FCM commitment period.
- F. Since no zonal model is likely to be able to adequately reflect all potential local reliability issues, ISO shall retain the right to require specific resources to participate in the energy markets. Given the current market rules, which assign obligation to participate in the energy markets solely through receipt of a capacity supply obligation, ISO shall retain the right to analyze resource de-list bids and bilateral exchanges of capacity supply obligation and to reject those that endanger the reliability of the system. In the event a proposal is offered to meet all or a portion of local reliability needs through alternate means, ISO requires that any such structure assure that the resulting procurement obligates sufficient resource participation in the energy markets to meet reliability needs. In the event the obligation to participate in the markets is assigned through means other than assignment of a capacity supply obligation, ISO shall retain the right to require participation in the energy markets through whatever other means may be applicable in that alternate structure.
- G. Enhance the Regional System Plan Process to consider:
- i. The impact of proposed transmission topology changes on zonal configuration and requirements.
  - ii. Identification of emerging issues that may require changes in zonal configuration.
  - iii. Identification of effective solutions to local security and reliability needs.
  - iv. Projections of zonal configurations under alternate expansion strategies.

**8. Demand Resources.**

- A. The issues regarding the rights and obligations applicable to Demand Resources in the Forward Capacity Market, including but not limited to obligations (e.g., participation in the energy markets as price-responsive demand), enforcement of performance obligations, and net payments, as well as applicability of Peak Energy Rent deductions, will be addressed in the NEPOOL Participant Processes.

**9. Permitting Greater Competition between New Internal Generating Resources and Imports.**

- A. Under existing rules, new, commercial internal generating capacity cannot use the interconnection space currently set aside for capacity imports including situations where the interconnection space would otherwise go unused for the Commitment Period. Changes to the Forward Capacity Market design will be considered through the stakeholder process to permit use of the overlapping impact interconnection space that is currently set aside for imports by both imports and new internal generators (including the ability for new internal generators to qualify for Forward Capacity Market sales using interconnection space that would otherwise be left unused).

**10. Import Capacity Resources.**

- A. The issues presented to the FCMWG regarding Import Capacity Resources include: (i) enhancement of the capability of an Import Capacity Resource to acquire a Capacity Supply Obligations from an Import Capacity Resource that cleared on another interface and/or from an internal Capacity Resources and (ii) allow for capacity wheel-through where ISO New England acts as the intervening control area e.g. a transaction from the Québec Control Area that flows across ISO New England and sinks into the New York ISO.
- B. The issues identified in 10(A) will be addressed in the NEPOOL stakeholder process.