



December 31, 2020

BY ELECTRONIC FILING

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

RE: ISO New England Inc. and New England Power Pool, Docket No. ER21- -000,

Market Rule 1 Change to Implement New Methodology for Calculating Forward

Capacity Market Dynamic De-List Bid Threshold

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act ("Section 205"), ¹ ISO New England Inc. (the "ISO"), joined by the New England Power Pool ("NEPOOL") Participants Committee² (together, the "Filing Parties"), ³ hereby electronically submit this transmittal letter and proposed revisions to the Tariff to implement a new methodology for calculating the Dynamic De-List Bid Threshold, a threshold used in the Forward Capacity Market. The Tariff changes are referred to in this filing as the "DDBT Methodology Change" and the Dynamic De-List Bid Threshold is sometimes referred to as the "DDBT." In support of the DDBT Methodology Change, the ISO is submitting the joint testimony of Matthew Brewster and Christopher Geissler (the "Brewster-Geissler Testimony"). ⁴ This testimony is sponsored solely by the ISO.

The Dynamic De-List Bid Threshold is an administrative threshold used in determining which Forward Capacity Market ("FCM") bids from capacity suppliers with existing capacity

² Capitalized terms used but not defined in this filing are intended to have the meaning given to such terms in the ISO New England Inc. Transmission, Markets and Services Tariff (the "Tariff"), the Second Restated New England Power Pool Agreement, and the Participants Agreement. Market Rule 1 is Section III of the Tariff.

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

³ Under New England's Regional Transmission Organization ("RTO") arrangements, the rights to make this filing of changes to Market Rule 1 under Section 205 of the Federal Power Act are the ISO's. NEPOOL, which pursuant to the Participants Agreement provides the sole Participant Processes for advisory voting on ISO matters, supported the changes reflected in this filing and, accordingly, joins in this Section 205 filing.

⁴ Mr. Brewster is a Supervisor in the ISO's Market Development Department. Dr. Geissler is a Principal Economist for the ISO.

The Honorable Kimberly D. Bose December 31, 2020 Page 2 of 24

must be reviewed by the ISO's Internal Market Monitor ("IMM") for the potential exercise of supplier-side market power in the Forward Capacity Auction ("FCA"). To prevent the exercise of supplier-side market power in an FCA, the IMM is charged with reviewing bids to withdraw existing capacity from the market (referred to as "de-list bids"), to assess whether those bids reflect a competitive offer price for providing capacity from the resource. The Dynamic De-List Bid Threshold serves as the cut-off point for IMM review: De-list bids priced at or above the DDBT are reviewed by the IMM, and de-list bids priced below the DDBT are not reviewed. If the DDBT is set appropriately, then it should balance the objective of preventing the exercise of market power with that of preventing unnecessary interference with market dynamics and competitive bidding in the auction.

Section III.13.1.2.3.1.A of the Tariff currently requires that the ISO update the DDBT at least once every three years. The Tariff does not contain a methodology for calculating the DDBT; instead, the ISO is to recalculate the value and file the updated value under Section 205 of the Federal Power Act ("FPA") for inclusion in the Tariff. Those filings historically have explained the methodology the ISO utilized to perform the DDBT calculation, and have provided support for that methodology.

In this filing, the Filing Parties are proposing to replace the current Tariff provisions on the triennial update and filing of the DDBT with a new requirement that the DDBT be calculated annually for each FCA, using a new DDBT calculation method that will be set forth in the Tariff. That methodology, referred to as the "recalibration method," updates the DDBT value for each auction based on the most recently available supply conditions, as evidenced in the last FCA, and the most up-to-date projected demand conditions, using the estimated system-wide demand curve for the next FCA. As the Filing Parties demonstrate, the recalibration method is a significant improvement over the DDBT calculation method that has been employed for the last six FCAs. The recalibration method uses only transparent, readily-available inputs, and an equally transparent formula, and produces a value that achieves a reasonable balance between protecting against the exercise of market power and minimizing interference with competitive bidding in the FCA.

I. REQUESTED EFFECTIVE DATE

The ISO requests that the Commission accept the DDBT Methodology Change to become effective on March 2, 2021, which is 61 days from the date of this filing. This will ensure that the new DDBT calculation methodology is in effect for the start of the relevant qualification activities for FCA 16, which begin in March of 2021, and will permit the ISO to employ the new recalibration method to calculate the DDBT for FCA 16. The DDBT value for FCA 16 is needed in March of 2021 prior to the deadline for the submittal of Retirement De-List Bids and Permanent De-List Bids on March 12, 2021.

II. DESCRIPTION OF THE FILING PARTIES; COMMUNICATIONS

The ISO is the private, non-profit entity that serves as the regional transmission organization ("RTO") for New England. The ISO operates the New England bulk power system and administers New England's organized wholesale electricity market pursuant to the Tariff and

The Honorable Kimberly D. Bose December 31, 2020 Page 3 of 24

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 Corporation ("NERC").

NEPOOL is a voluntary association organized in 1971 pursuant to the New England Power Pool Agreement, and it has grown to include more than 510 members. The Participants include all of the electric utilities rendering or receiving service under the Tariff, as well as independent power generators, marketers, load aggregators, brokers, consumer-owned utility systems, end users, demand resource providers, developers and a merchant transmission provider. Pursuant to revised governance provisions accepted by the Commission,⁵ the Participants act through the NEPOOL Participants Committee. The Participants Committee is authorized by Section 6.1 of the Second Restated NEPOOL Agreement and Section 8.1.3(c) of the Participants Agreement to represent NEPOOL in proceedings before the Commission. Pursuant to Section 2.2 of the Participants Agreement, "NEPOOL provide[s] the sole Participant Processes for advisory voting on ISO matters and the selection of ISO Board members, except for input from state regulatory authorities and as otherwise may be provided in the Tariff, TOA and the Market Participant Services Agreement included in the Tariff."

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

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

Tel: (413) 540-4425 Fax: (413) 535-4379

E-mail: chamlen@iso-ne.com

And to NEPOOL as follows:

William Fowler*
Vice-Chair,
NEPOOL Markets Committee
c/o Sigma Consultants, Inc.
20 Main Street
Acton, MA 01720
Tel: (978) 266-0220

Fax: (978) 263-5455 E-mail: wfowler@sigmaconsult.com Sebastian M. Lombardi, Esq.* Rosendo Garza, Jr., Esq. Day Pitney LLP 242 Trumbull Street Hartford, CT 06103

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

E-mail: slombardi@daypitney.com rgarza@daypitney.com

⁵ ISO New England Inc., et al., 109 FERC ¶ 61,147 (2004).

*Persons designated for service⁶

III. STANDARD OF REVIEW

The proposed Tariff changes are being submitted pursuant to Section 205, which "gives a utility the right to file rates and terms for services rendered with its assets." Under Section 205, the Commission "plays 'an essentially passive and reactive role" whereby it "can reject [a filing] only if it finds that the changes proposed by the public utility are not 'just and reasonable." The Commission limits this inquiry "into whether the rates proposed by a utility are reasonable - and [this inquiry does not] extend to determining whether a proposed rate schedule is more or less reasonable than alternative rate designs." The changes proposed herein "need not be the only reasonable methodology, or even the most accurate." As a result, even if an intervenor or the Commission develops an alternative proposal, the Commission must accept this Section 205 filing if it is just and reasonable. 12

IV. PROPOSED METHODOLOGY FOR CALCULATING THE DYNAMIC DE-LIST BID THRESHOLD

A. Background

The Dynamic De-List Bid Threshold is established by the ISO to serve as a line of demarcation between FCM de-list bids that must be evaluated by the IMM for the exercise of supplier-side market power and de-list bids that are not subject to IMM review. While the role of the DDBT in the FCM is well established, it is useful to review its function and the target level for the DDBT.

1. The Functions of the DDBT

The DDBT serves two functions. First, prior to the FCA, suppliers of existing capacity must submit their de-list bids to the IMM for market power mitigation review if the supplier

⁶ 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.

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

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

⁹ *Id.* at 9.

¹⁰ City of Bethany v. FERC, 727 F.2d 1131, 1136 (D.C. Cir. 1984).

¹¹ Oxy USA, Inc. v. FERC, 64 F.3d 679, 692 (D.C. Cir. 1995).

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

The Honorable Kimberly D. Bose December 31, 2020 Page 5 of 24

wishes to remove the capacity from the auction at a price that is at or above the DDBT. Second, during the FCA, if the descending clock auction's price falls below the DDBT, then suppliers with existing capacity remaining in the auction are able to bid in the auction "dynamically" to withdraw that capacity at any price. To understand these two functions, it is helpful to walk through the mechanics of the auction bidding process for suppliers of capacity from "existing" resources—*i.e.*, a resource that has received an obligation to provide capacity in a previous FCA—and certain mechanics for addressing the potential exercise of supplier-side market power.

A de-list bid submitted for an FCA indicates the quantity of capacity from an existing resource that the supplier wishes to remove from the capacity market, as well as a corresponding price at which the capacity will be removed. If the auction clears at or below a supplier's delist bid price, then the supplier's de-list bid does not receive a Capacity Supply Obligation ("CSO") for the relevant delivery year. If the auction clears above a supplier's de-list bid price, then the supplier receives a CSO for the delivery year.

Supplier-side market power may be exercised by a capacity supplier that submits a de-list bid for a portion of its capacity portfolio at a price that is above both (a) its true cost of providing that capacity and (b) the auction's competitive clearing price (*i.e.*, the clearing price that does not reflect the influence of market power). For ease of reference, a de-list bid that meets both of these conditions is referred to herein as an "inflated" de-list bid. In the absence of mitigation, the inflated de-list bid price could raise the auction's clearing price, which could enable the supplier (and all other suppliers that receive a CSO and receive the same clearing price) to profit from the higher price paid to their remaining portfolio, resulting in excess costs to consumers. While several conditions must be met for a supplier to effectively exercise market power, counteracting attempts at bid-inflation is an important step in the market power mitigation process, and the DDBT is a mechanism that is employed as part of the process used to prevent such bid price inflation and its potentially adverse impact on market outcomes.¹⁵

To assess whether a supplier is attempting to exercise market power through submitting an inflated de-list bid, the IMM must review the de-list bids for existing capacity in advance of

Multiple types of de-list bids may be submitted in the auction, including Retirement De-List Bids and Permanent De-List Bids, which are submitted to retire capacity altogether from the markets or permanently remove the capacity from the FCM (leaving the resource to participate only in non-capacity markets), and Static De-List Bids and Export Bids, which permit the removal of capacity from the markets for a temporary period. These differences are not germane to the discussion of the DDBT, as all such de-list bids are potentially subject to IMM review for the possible exercise of market power.

¹⁴ The auction clearing process for existing capacity is addressed, in substantial part, in Section III.13.2.3 of Market Rule 1, which addresses the conduct of the FCA, and in Section III.13.2.5.2 of Market Rule 1, which addresses the submittal of bids from existing capacity resources. While not relevant for purposes of this filing, the Tariff also contains a series of rules that specify when de-list bids will be reviewed to determine whether the request to withdraw the capacity must be denied for reliability reasons.

¹⁵ Brewster-Geissler Testimony at 8-9.

The Honorable Kimberly D. Bose December 31, 2020 Page 6 of 24

the auction. This process begins approximately 11 months before the FCA,¹⁶ when the IMM begins an extensive review of information provided by the supplier to verify whether the de-list bid reflects the supplier's true costs.¹⁷ If the IMM determines that the de-list bid price is materially higher than the supplier's true costs for that capacity, the IMM issues a lower IMM-determined de-list bid price. Once the IMM-determined price is issued, the Tariff allows a supplier certain limited opportunities to adjust its de-list bid price below the IMM-determined price, or withdraw the de-list bid altogether.¹⁸ Subsequently, the finalized de-list bids are submitted to the Commission for its review and approval several months ahead of the FCA.¹⁹ If approved, that value is used in the auction clearing process when mitigation is necessary, and the supplier will have no flexibility to change its bid price for the capacity during the auction.

During the conduct of the FCA the DDBT defines which de-list bids can be submitted during the auction process itself, without IMM mitigation review. Within the FCA, the descending clock auction is where the final bid and offer prices are collected from *all* suppliers. If the descending clock auction's price falls below the DDBT value (*i.e.*, if the auction clearing continues below the DDBT), then suppliers with existing capacity remaining in the auction are able to use "dynamic" bids to indicate their preferred offer price for that capacity. These Dynamic De-List Bids are not subject to IMM cost review.

2. The Target Level for the DDBT

Given the role of the DDBT, Mr. Brewster and Dr. Geissler explain in their supporting testimony that the target level of the DDBT is the one that (1) will ensure the IMM is able to review all de-list bids that can increase the clearing price of the auction above the competitive level while (2) not requiring the IMM to review de-list bids that cannot increase the clearing price above the competitive level.²¹ Mr. Brewster and Dr. Geissler explain that these objectives

¹⁶ Section III.13.1.2.3 of Market Rule 1 sets forth the qualification requirements for existing capacity resources, including the de-list bid submittal requirements. The submittal deadlines and IMM review timeframes differ depending on the type of de-list bid, though the process is generally the same for all types of de-list bids.

¹⁷ See Section III.13.1.2.3.2.1 of Market Rule 1, which addresses the obligation of the IMM to review delist bids with prices at or about the DDBT. While all export, permanent and retirement bids must be submitted in advance for possible IMM review, Section III.13.1.2.3.2.1 clarifies that the IMM is only to review export, permanent and retirement bids that are at or above the DDBT.

¹⁸ See Section III.13.1.2.3.1.1 of Market Rule 1. These options are available only for Static De-List Bids.

¹⁹ See Section III.13.8.1 of Market Rule 1.

²⁰ Section III.13.2.3.2(d) of Market Rule 1 addresses the clearing of Dynamic De-List Bids in the auction.

²¹ See the Brewster-Geissler Testimony at 12-17 for their explanation of the factors that influence and determining the target price level for the DDBT.

The Honorable Kimberly D. Bose December 31, 2020 Page 7 of 24

will be achieved if the DDBT is set at the next FCA's capacity clearing price established under competitive conditions.²²

To understand why the target price level of the DDBT is the next FCA's competitive clearing price, it is helpful to remember how supplier-side market power functions. As explained above, a consequence of submitting a de-list bid at a price that is above a supplier's true cost of supplying capacity can be that the auction clearing price is raised *above* the competitive level. As Mr. Brewster and Dr. Geissler explain in their supporting testimony, in order to raise the clearing price above the competitive level, a supplier must have true costs at or below the competitive clearing price but submit a bid with a price that is above the competitive clearing price.²³ If the supplier's bid is priced *below* the competitive clearing price, it cannot increase the clearing price above the competitive level, and therefore is of no concern from a market power perspective.²⁴

Therefore, given the purpose of the DDBT, Mr. Brewster and Dr. Geissler explain that the ideal level at which to set the DDBT value is the clearing price of the next FCA under competitive conditions—*i.e.*, the price of the next FCA that does not reflect the exercise of supplier-side market power.²⁵ Setting the DDBT at this level will ensure that the IMM reviews only de-list bids from suppliers of existing capacity that can increase the clearing price of the auction above the competitive level.²⁶

There are, however, additional factors that must be accounted for when establishing a method to calculate the DDBT. One such factor is timing. It is not possible to predict perfectly the competitive clearing price of the next FCA—that price will be revealed only when the auction is run. But estimating a competitive clearing price is made more difficult because the DDBT must be established almost a year before the auction occurs, so that it can be utilized for the FCA qualification process that begins approximately 11 months before the auction.²⁷

A second factor—related to the first—is the potential impact of the DDBT on competitive bidding. While it might seem appropriate to err on the side of caution and set the DDBT value low in order to increase the likelihood of reviewing all bids that may influence the FCA clearing price, doing so could adversely impact competition during the auction.²⁸ As Mr.

²² *Id.* at 12.

²³ *Id.* at 12-13.

²⁴ Mr. Brewster and Dr. Geissler demonstrate this relationship in a series of examples at 13-15 of the Brewster-Geissler Testimony.

²⁵ Brewster-Geissler Testimony at 12-15.

²⁶ *Id*.

²⁷ *Id.* at 16.

²⁸ In fact, in prior updates to the DDBT, the IMM chose to err on the side of caution by placing greater weight on setting the DDBT at a level that will permit the IMM to review bids that are just under the likely competitive clearing price in the auction. *See, e.g., ISO New England Inc. and New England Power*

The Honorable Kimberly D. Bose December 31, 2020 Page 8 of 24

Brewster and Dr. Geissler explain, setting the DDBT conservatively low "will increase the occurrence of unnecessary interference with bids that cannot exercise market power and frustrate the ability of suppliers to reflect their willingness to sell capacity during the auction."²⁹

For example, if the DDBT was deliberately set *below* the target level of the competitive clearing price, then a de-list bid that cannot exercise market power (by virtue of being below the competitive clearing price) might still need to be reviewed by the IMM if it was above this (low) DDBT value. ... In that case, the bid would need to be pre-submitted to the IMM and have its final price determined during the FCA's qualification process—many months in advance of the FCA—despite the fact that the supplier's bid, submitted at a price below the competitive clearing price, cannot exercise market power to raise the auction's clearing price. That situation would inhibit the supplier's ability to incorporate any updated resource-specific cost information learned after its pre-submitted bid is finalized, or to incorporate information about market conditions revealed during the auction that may affect the cost of a capacity obligation. In the worst-case scenario, deliberately setting the DDBT low could adversely impact the supplier's ability to reflect its true cost of providing capacity at the time of auction, and the market's ability to cover such costs or procure the least-cost resources, despite the fact that the supplier in question could not exercise market power.³⁰

These additional factors reflect certain tensions that must be addressed when establishing a calculation method for the DDBT, and are discussed in greater detail below in this transmittal letter in setting forth the design objectives the ISO accounted for when evaluating ways to improve the DDBT calculation.

B. The Current Tariff Requirements for Setting the DDBT and the Method Used since FCA 9

Section III.13.1.2.3.1.A of the Tariff requires that the ISO update the DDBT at least once every three years.³¹ The Tariff does not currently contain a formula or instructions for how the DDBT is to be set. Instead, the IMM has historically developed a formula for updating the DDBT, and the resulting DDBT value, along with the supporting formula and an explanation of its application, have been filed with the Commission under Section 205 of the FPA.

Pool, Update to Forward Capacity Market Dynamic De-List Bid Threshold, Docket No. ER18-620-000 (filed January 8, 2018) ("FCA 13 DDBT Update Filing"), transmittal letter at 2 (explaining that "the IMM attempts to set the DDBT just below its best estimate of the competitive price from the marginal resource in the target auction"). As is addressed below, Mr. Brewster and Dr. Geissler explain why, in developing the proposed calculation method, they have weighted other factors more equally.

²⁹ Brewster-Geissler Testimony at 16.

³⁰ *Id.* at 17.

³¹ Market Rule 1, Section III.13.1.2.3.1.A.

The Honorable Kimberly D. Bose December 31, 2020 Page 9 of 24

In prior updates to the DDBT, the IMM has employed a manual process to calculate a DDBT value. That manual process, referred to herein as the "manual estimation method," involved estimating the marginal resource's bid price in future auctions using a sample of (generally non-public) bid data from the most recent FCA. This methodology was first employed when the DDBT was calculated for FCA 9, 32 and then again when the DDBT was updated for FCAs $10 - 12^{33}$ and 13 - 15. 34

To perform the manual estimation method, the IMM attempted to determine the likely marginal resources—that is, the resources that will set the clearing price in the future auctions—and calculate the respective resources' competitive bid for future auctions using an "optimal bid formula." That formula is one that a capacity supplier would, in theory, utilize to develop a competitive bid price under the FCM's two-settlement capacity market design (also known as the Pay for Performance, or "PFP" design). The formula has two components. The first component involves system-level parameters and reflects certain costs associated with a supplier's expected Capacity Performance Payments under the two-settlement capacity market design. Because this first component is common across all suppliers, it is referred to as the

For the first seven FCAs, the DDBT was set at 80 percent of gross Cost of New Entry ("CONE"). For a single year, i.e., FCA 8, it was reduced to \$1.00/kW-month. *See ISO New England Inc.*, 142 FERC ¶ 61,107 at PP 123 n.117, 126 (2013) (noting that the ISO proposed changing the DDBT from 80 percent of gross CONE to \$1.00/kW-month in advance of FCA 8); *Devon Power LLC*, 115 FERC ¶ 61,340 at PP 28, 146, 147 (2006) (providing that at the inception of the FCM, the DDBT would be set at 80 percent of gross CONE, which the Commission approved). For FCA 9, the DDBT was raised from \$1.00/kW-month to \$3.94/kW-month. *See ISO New England Inc. and New England Power Pool*, Order on Tariff Filing and Instituting Section 206 Proceeding, 147 FERC ¶ 61,172 (2014) ("FCA 9 DDBT Update Order") at PP 91 and 96. *See also ISO New England Inc. and New England Power Pool*, Filings of Performance Incentives Market Rule Changes, Docket No. ER14-1050-000 (filed January 17, 2014) ("FCA 9 DDBT Update Filing"), Joint Testimony of David LaPlante and Seyed Parviz Gheblealivand on behalf of the ISO (the "LaPlante-Alivand Testimony"), at pp. 53-61.

³³ For FCAs 10-12, the DDBT was raised from \$3.94/kW-month to \$5.50/kW-month. *See ISO New England Inc. and New England Power Pool*, Order on Tariff Revisions, 151 FERC ¶ 61,270 (2015) ("FCA 10-12 DDBT Update Order") at PP 34 and 39.

³⁴ For FCAs 13-15, the DDBT was lowered from \$5.50/kW-month to \$4.30/kW-month. *See ISO New England Inc. and New England Power Pool*, Order Accepting Tariff Revisions, 162 FERC ¶ 61,206 (2018) ("FCA 13 DDBT Update Order") at P 32.

³⁵ See FCA 9 DDBT Update Filing, LaPlante-Alivand Testimony at 53-61; FCA 13 DDBT Update Filing, transmittal letter at 8-15. For the FCA 10 update, the IMM employed a modified version of the optimal bid formula, which derived the DDBT through an analysis of de-list bids submitted in the prior auction from oil-fired steam capacity resources. See ISO New England Inc. and New England Power Pool, Market Monitoring-Related Capacity Market Changes, Docket No. ER15-1650-000 (filed May 1, 2015) ("FCA 10 DDBT Update Filing"), Joint Testimony of Jeffrey R. McDonald and Robert V. Laurita at 6-13.

³⁶ See FCA 9 DDBT Update Filing, LaPlante-Alivand Testimony at 55-56 for an overview of the optimal bid formula.

The Honorable Kimberly D. Bose December 31, 2020 Page 10 of 24

"common value component." The second, additive component reflects resource-specific data, including the resource's expected performance and its going-forward costs of continued operations. This second component is specific to the resource, and is referred to as the "resource-specific component" of a capacity supplier's competitive de-list bid price.³⁷

As Mr. Brewster and Dr. Geissler explain, while the manual estimation method has served as a reasonable approach for calculating the DDBT, it has a number of limitations, which the Filing Parties have taken into consideration, and sought to overcome, in developing a new DDBT calculation methodology.³⁸ These limitations are summarized here, and addressed in greater detail in the Brewster-Geissler Testimony.³⁹

Reliance on non-transparent information and data. To establish the resource-specific component used in the manual estimation method, the IMM has historically used confidential delist bid data submitted by capacity suppliers in prior auctions. This renders the DDBT calculation non-transparent to stakeholders, leaving them unable to assess the reasonableness of the inputs and the derivation of the DDBT value. The method is also highly dependent on having a set of historic de-list bids to utilize in the process, which can be problematic if insufficient de-list bids are submitted in prior auctions, or if the prior auction's clearing does not reveal sufficient information about bid prices to be of use in the future auction's DDBT calculation.

Requirement to choose bids from prior auction selectively. While the optimal bid formula itself is economically sound, the formula itself does not provide guidance on the choice of the bids that should be analyzed when attempting to update the DDBT using a manual estimation method. The IMM has therefore needed to employ its judgement in selectively choosing historical bids that represent the likely marginal resources in future auctions. ⁴² "That historical bid selection (or sampling) process relies on the judgement of those at the ISO responsible for performing the [DDBT] calculation to choose which resource(s) are likely to be

³⁷ *Id*.

³⁸ Brewster-Geissler Testimony at 20-24.

³⁹ *Id*.

⁴⁰ *Id.* at 21-22.

⁴¹ *Id*.

⁴² See FCA 9 DDBT Update Filing, LaPlante-Alivand Testimony at 60 (explaining the choice to use "delist submissions made by fossil steam units for the eighth Forward Capacity Auction reviewed by the IMM in summer 2013" in the DDBT calculation); FCA 10 DDBT Update Filing, McDonald-Laurita Testimony at 9 (explaining the use of de-list bids from oil-fired steam units submitted in the prior auction to calculate the DDBT for FCA 10); FCA 13 DDBT Update Filing, transmittal letter at 11 (explaining the choice of a range of Dynamic De-List Bids submitted in FCA 11 for use in updating the DDBT for FCA 13).

The Honorable Kimberly D. Bose December 31, 2020 Page 11 of 24

the marginal supplier(s) in a future auction, and which resources are not."⁴³ This also compounds the concerns over the method's lack of transparency.⁴⁴

Potential staleness of the resulting DDBT value. While the ISO is permitted under the Tariff to update the DDBT value more frequently than once every three years, the complexity of the manual estimation process has generally meant that the value remains in place for more than one auction cycle. This increases the potential for the value to become "stale," negating its effectiveness and its purpose. This staleness problem can be compounded by the limited availability of historical data utilized for the manual estimation method, and the need to calculate the DDBT well in advance of the next FCA. For the most recent update of the DDBT (for FCA 13), the IMM relied on de-list bid data that were two years out of date by the time the first auction for which the DDBT was set (FCA 13) took place.

The identified concerns prompted the ISO to undertake, in conjunction with stakeholders, an initiative to develop a new method for calculating the DDBT that improved upon the manual estimation method. The ISO focused on developing a method that could be employed annually, to ensure that the DDBT value remained current, and one that utilized transparent inputs and a transparent calculation formula that could be easily replicated and utilized by stakeholders.

C. Design Objectives for Establishing a New DDBT Calculation Method

The ISO identified three design objectives that it sought to satisfy in developing a new method for calculating the DDBT. These design objectives accounted for the role and target level for the DDBT, and further took account of the limitations identified with the manual estimation method. The design objectives are summarized here, along with considerations regarding how the tension between these objectives must be accounted for in establishing the DDBT, and how differences in market conditions factor into the design of the DDBT calculation method.⁴⁷

1. Summary of the Design Objectives

Objective 1 - Prevent the exercise of supplier-side market power

The first design objective is to calculate a DDBT value that protects the FCA against a potential exercise of supplier-side market power, which is a primary purpose of the DDBT. As Mr. Brewster and Dr. Geissler explain, approaches that produce lower DDBT values perform better with respect to this first design objective: "as the DDBT value decreases, a larger number

⁴³ Brewster-Geissler Testimony at 21.

⁴⁴ *Id.* at 21-22.

⁴⁵ *Id.* at 23-24.

⁴⁶ *Id.* at 23-24; FCA 13 DDBT Update Filing, transmittal letter at 11-12.

⁴⁷ See Brewster-Geissler Testimony at Section V.

The Honorable Kimberly D. Bose December 31, 2020 Page 12 of 24

of de-list bids are reviewed for the potential exercise of supplier-side market power. As such, the broader the range of bid prices that are subject to IMM review, the lower the chances are that a supplier can exercise market power in the FCA."⁴⁸

Objective 2 – Limit unnecessary administrative interference in the FCM that may reduce the market's efficiency

Setting the DDBT at or close to a price of zero would optimize the chances of achieving the first design objective, however this would cause the IMM to review all or virtually all bids for existing capacity in the FCA. This result implicates, and is contrary to, a second design objective, which is to prevent unnecessary administrative interference in the FCM that could reduce the market's efficiency. Such interference can occur in multiple ways. First, the IMM's review of a de-list bid, while intended to improve market efficiency, can have the opposite effect if the IMM produces a less accurate measure of the supplier's true costs to supply capacity. As the Brewster-Geissler Testimony explains, "with the ever-increasing complexity of resources' technologies and their attendant cost structures, the changes in energy market expectations with the region's rapidly-evolving resource mix, and the limitations inherent in any cost estimation process, errors are possible." 50

Second, the mitigation review process itself mandates that de-list bids that require review be finalized well in advance of the auction (at the latest, in October prior to the FCA in February), creating the potential for the finalized bid to be out-of-date, and not reflect the seller's true cost of supplying capacity in the auction. This can occur if either the market or resource conditions change after the de-list bid is finalized, or if changed capacity market conditions are revealed during the auction (*e.g.*, when aggregate supply information is shared at the end of each auction round). When market conditions change in this manner, a supplier's bid price may exceed or understate its true cost to supply capacity at the time the auction is run.⁵¹

Third, the process of developing and analyzing the cost information required for the delist bid mitigation review is time consuming (and therefore costly) both for the supplier and for IMM staff. While the mitigation review and its associated costs are necessary when there is a concern that market power could be exercised, it is better to avoid these costs when practical, in particular when a supplier's bid price is unlikely to reflect the exercise of market power.⁵²

Each of these factors can adversely impact the overall competitiveness of the bids submitted in the auction process, and therefore must be accounted for in setting the DDBT. Note

⁴⁸ *Id.* at 26-27.

⁴⁹ *Id.* at 27-29.

⁵⁰ *Id.* at 28.

⁵¹ *Id.* at 28-29.

⁵² *Id.* at 29.

The Honorable Kimberly D. Bose December 31, 2020 Page 13 of 24

that contrary to the first design objective, this second objective of minimizing unnecessary inference in the bid submittal process weights in favor of a *higher* DDBT value.⁵³

Objective 3 – Use a transparent and robust calculation method

The third design objective is to use a transparent and robust calculation method to set the DDBT. Transparency in markets is generally consistent with sound market design, as market participants can develop more informed expectations about future DDBT values when they understand the methodology and inputs used to produce the DDBT value.⁵⁴ Further, using only publicly-available inputs minimizes concerns about the potential for the calculation to reveal market sensitive information about bids or the shape of the market's supply curve.⁵⁵

Developing a methodology that is robust to a broad range of market conditions and dynamic changes is similarly important.⁵⁶ If the design would only produce a reasonable DDBT value under limited market conditions, then it would require potentially contentious ongoing revisions and modifications. This would diminish the transparency of the design and its ability to support informed expectations about future DDBT values.⁵⁷

2. Addressing the Tension Between the Design Objectives

As explained above, design objective 1 generally supports setting the DDBT value at a *lower* price to allow for a cost review of more de-list bids, which will increase the likelihood that a bid from a supplier that is attempting to exercise supplier-side market power is reviewed. However, design objective 2 instead supports setting the DDBT value at a *higher* price to reduce adverse administrative interference in conducting the FCA. As a result, approaches to setting the DDBT that tend to perform better with respect to design objective 1 will generally perform worse with respect to design objective 2, and vice versa.⁵⁸

In the development of the new DDBT method, the ISO sought an approach that strikes an appropriate balance between these design objectives.⁵⁹ The proposed methodology seeks to thwart the deleterious effects of supplier-side market power while also appreciating that applying unnecessary administrative hurdles to competitive bidding in the capacity market can reduce the market's efficiency and create needless costs.

⁵³ *Id.* at 30-31.

⁵⁴ *Id.* at 31.

⁵⁵ *Id*.

⁵⁶ *Id.* at 31-32.

⁵⁷ *Id*.

⁵⁸ *Id.* at 32.

⁵⁹ *Id.* at 32-33.

The Honorable Kimberly D. Bose December 31, 2020 Page 14 of 24

To achieve this balance, the proposed design also accounts for the manner in which differing market conditions impact the ability of capacity suppliers to effectively exercise market power. As Mr. Brewster and Dr. Geissler demonstrate, the extent to which a capacity supplier's attempted exercise of market power impacts the clearing price is closely related to the shape of the supply and demand curves in the range of the competitive clearing outcome:

Generally, as the supply and demand curves become "flatter" (*i.e.*, more elastic), the price impact of withholding supply to exercise market power decreases. A flatter region of the supply curve indicates that cost differences between suppliers are less significant. Similarly, a flatter demand curve indicates that if a supplier does not sell capacity (and as a result, the total cleared capacity decreases), then the increase in the clearing price will be modest.

Conversely, as a general rule, as the supply and demand curves become "steeper" (*i.e.*, more elastic), the price impact of withholding supply increases. Generally, the steeper regions of the aggregate supply curve reflect that differences in the costs to provide capacity are greater among suppliers in that region of the curve. Similarly, a steeper demand curve indicates that if a supplier does not sell capacity (and as a result, the total cleared capacity decreases), then the increase in the clearing price will be larger. ⁶⁰

The proposed method for calculating the DDBT accounts for these differences by placing additional weight on design objective 1 during market conditions where the supply and demand curves are expected to be relatively steep, and thus when the exercise of supplier-side market power is of greater concern. This concern is of greatest significance when the capacity price is higher. Conversely, during market conditions where the competitive clearing price is expected to be in a range where the supply and demand curves tend to be flatter, the design places additional weight on design objective 2, which seeks to minimize administrative interference in competitively-based bidding. These conditions are more likely to occur when the capacity price is lower.

D. The Proposed Methodology for Calculating the DDBT

The ISO is proposing to memorialize in the Tariff a new methodology for calculating the DDBT that employs an equation to estimate the competitive clearing price for the next FCA.

⁶⁰ *Id.* at 34-35. *See also* Brewster-Geissler Testimony at 34-38 for illustrative examples of these principles.

⁶¹ *Id.* at 39-41.

⁶² *Id*.

⁶³ *Id*.

⁶⁴ *Id*.

The Honorable Kimberly D. Bose December 31, 2020 Page 15 of 24

The core element of the equation is the simple average of two prices: (1) the last FCA's actual system-wide capacity clearing price; and (2) the price at which the last FCA's total cleared supply quantity would intersect with the estimated system-wide demand curve for the next FCA. This average produces a "preliminary" DDBT value, which is then adjusted by the application of maximum and minimum constraints, as well as the addition of a "margin" that is dependent on the expected market conditions. This methodology is referred to as the "recalibration method," reflecting the design's intent to update—that is, to recalibrate—the DDBT value for *each* auction based on the most recently available supply conditions (as evidenced in the last FCA) and the most up-to-date projected demand conditions (using the estimated system-wide demand curve for the next FCA).⁶⁵

1. The Core Calculation Method

The core calculation in the recalibration method estimates the competitive clearing price for the next FCA based on three publicly-known inputs: (1) the total quantity of capacity that cleared (*i.e.*, acquired a Capacity Supply Obligation) in the last FCA, (2) the system-wide capacity clearing price in the last FCA, and (3) the projected change in demand for the *next* FCA. Additional detail regarding how each of these three inputs is derived is provided in the Brewster-Geissler Testimony at Section VI.C. As Mr. Brewster and Dr. Geissler explain, "The concept underlying the method is to observe the actual market conditions (in the last FCA) and estimate how the intersection of supply and demand may change for the next FCA, considering the projected change in demand and assuming (reasonably) that the market supply curve will have an upward slope."

By accounting for projected changes in demand for the next auction, it is reasonable to expect that the core calculation will produce a reasonable estimate of the next auction's competitive clearing price.⁶⁷ This is because both the direction and magnitude of the change in the next auction's clearing price can be expected to relate directly to the change in auction demand from year-to-year. Thus, when demand decreases, it is reasonable to expect the competitive clearing price to decrease, and vice versa.⁶⁸ And similarly with respect to magnitude, when demand increases or decreases significantly, it is reasonable to expect a sizable change in the market-clearing quantity and the competitive clearing price; and the converse is reasonably anticipated when demand increases or decreases modestly.⁶⁹ These principles are illustrated in the Brewster-Geissler Testimony with two examples of how the recalibration

⁶⁵ *Id.* at 42.

⁶⁶ *Id.* at 43.

⁶⁷ *Id.* at 43-44.

⁶⁸ *Id*.

⁶⁹ *Id*.

The Honorable Kimberly D. Bose December 31, 2020 Page 16 of 24

method is employed to calculate the DDBT under two sets of market conditions, one where demand is increasing from one auction to the next, and one where demand is decreasing.⁷⁰

As explained above, the core calculation method produces the preliminary DDBT value by *averaging* the clearing price from the last FCA and the price of the estimated demand curve in the next auction at the last FCA's total cleared supply quantity. This simple average (as opposed to using just the updated price) is an important part of the recalibration methodology, as it produces an estimate of the change in the next FCA clearing price that is consistent with an upward sloping supply curve, rather than a horizontal or vertical supply curve, and further reflects that the total amount of capacity acquired in the FCA will be responsive to changes in the capacity demand curve.⁷¹ These principles are also illustrated in the two examples of the core methodology provided in the Brewster-Geissler Testimony.⁷²

2. Adjustments to the Preliminary DDBT Value

Once the preliminary DDBT value is derived, the recalibration method applies a *maximum limit*, a *minimum limit*, and then an upward adjustment, or *margin*. As Mr. Brewster and Dr. Geissler explain, the maximum and minimum limits "help[] address the concern that the simple averaging approach may overstate the change in the competitive clearing price when there is a significant change in the auction demand."⁷³ They further "help the design to reflect a desired balance of design objectives 1 and 2 in specific market conditions, ... as preferred by the region's stakeholders"⁷⁴ The margin similarly seeks to reflect that the potential for market power is "likely to be greater as market conditions become tighter and expected clearing prices are higher,"⁷⁵ and are "less acute when the market is in surplus conditions and capacity prices are lower."⁷⁶

The maximum limit applies to cap the DDBT value at no greater than 75 percent of the Net Cost of New Entry ("Net CONE") for the next FCA. This limit is relevant when capacity prices are expected to be higher, and the core calculation specifies a preliminary DDBT that approaches or exceeds the market's Net CONE value. As discussed above, under such conditions, the exercise of market power could have a more severe impact on the auction's clearing price. The application of the maximum limit therefore serves to reduce the likelihood that the DDBT is set above the competitive clearing price, to prevent the exercise of market

⁷⁰ *Id.* at 44-47.

⁷¹ *Id.* at 47-48.

⁷² *Id.* at 44-47.

⁷³ *Id.* at 58.

⁷⁴ *Id*.

⁷⁵ *Id.* at 62.

⁷⁶ *Id*.

The Honorable Kimberly D. Bose December 31, 2020 Page 17 of 24

power (and thus emphasize the importance of the ISO's first design objective) when the risk would be greatest.⁷⁷

The minimum limit applies to prevent the DDBT value from decreasing to less than 75 percent of the last FCA clearing price. This limit is relevant when there is a significant year-to-year reduction in demand. During such conditions, where prices are expected to be lower and the supply and demand curves become flatter, suppliers may be less likely to be in a position to exercise market power, and the effects of the exercise of market power would be less severe than under other market conditions. Applying the minimum limit takes account of these factors to place additional emphasis on the ISO's second design objective during conditions when the risk of market power is lower.

The margin is added to the DDBT value after the maximum and minimum limits are imposed. The margin functions to increase the final DDBT value in a graduated, price-dependent manner. By design, the margin value will increase as the preliminary DDBT value decreases, and will decrease as the preliminary DDBT value increases. The margin value will be zero when the preliminary DDBT is at the maximum limit (*i.e.*, at 75 percent of Net CONE for the next FCA), and will increase as the preliminary DDBT moves toward its minimum limit. As with the maximum and minimum limits, the margin seeks to reflect that the potential for market power is likely to be greater as market conditions become tighter and expected clearing prices are higher, and is likely to be of less concern when the market is in surplus conditions and capacity prices are lower. By

E. Evaluation of the Performance of the Recalibration Method Relative to the Objectives

To evaluate the efficacy of the recalibration method, the ISO conducted an empirical analysis that compared the DDBT value calculated using the recalibration method to the actual FCA capacity clearing prices in the last six auctions, and further to the actual DDBT values employed for those auctions, calculated using the manual estimation method. That analysis is explained in detail in Section VII of the Brewster-Geissler Testimony, and is particularly important for evaluating the effectiveness of the new DDBT recalibration method in meeting its design objectives. The table below summarizes the results of the analysis.

⁷⁷ *Id*. 58-59.

⁷⁸ *Id*. 60-61.

⁷⁹ *Id*.

⁸⁰ The margin is calculated using a ratio of (1) the difference between the value of 75 percent of Net CONE and the preliminary DDBT value (after applying the minimum and maximum limits described above) and (2) the value of 75 percent of Net CONE. By construction, this ratio will be between zero and one. The ratio value is multiplied by \$1/kW-month to determine the dollar value of the margin.

⁸¹ Brewster-Geissler Testimony at 62-63.

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
FCA	FCA Clearing Price	Actual DDBT	Actual DDBT Error (\$/kW-month) =B-A	Actual DDBT Abs. Percent Error =/(B-A)/A/	Recal. DDBT	Recal. DDBT Error (\$/kW-month) =E-A	Recal. DDBT Abs. Percent Error =/(E-A)/A/
FCA 9	\$9.55	\$3.94	(\$5.61)	59%	\$8.31	(\$1.24)	13%
FCA 10	\$7.03	\$5.50	(\$1.53)	22%	\$8.11	\$1.08	15%
FCA 11	\$5.30	\$5.50	\$0.20	4%	\$6.97	\$1.67	31%
FCA 12	\$4.63	\$5.50	\$0.87	19%	\$4.32	(\$0.31)	7%
FCA 13	\$3.80	\$4.30	\$0.50	13%	\$4.57	\$0.77	20%
FCA 14	\$2.00	\$4.30	\$2.30	115%	\$3.39	\$1.39	69%
Average				39%			26%

Table 1: Performance of the actual and recalibration DDBT values

As the data in Table 1 reflect, when applied to the last six FCAs, the DDBT calculated using the recalibration method produces, on average, a more accurate estimate of the actual FCA clearing price than the actual DDBT value calculated using the manual estimation method. Specifically, the DDBT calculated using the recalibration method (column E) differs from the auction's clearing price (column A) by an average of 26 percent (column G), as measured using the absolute value of the estimation error. This can be compared to a difference of 39 percent (column D) in the absolute value of the estimation error for the actual DDBT values (column B). This analysis therefore indicates that the new recalibration method is likely to produce DDBT values that are, on average, a better estimate of the competitive clearing price than the manual estimation method that has been applied in the prior six FCAs.⁸²

Mr. Brewster and Dr. Geissler explain the significance of these findings relative to the design objectives employed in developing the proposed recalibration method:

[T]o the extent that the new DDBT recalibration method is less likely to significantly *overestimate* the competitive clearing price (*i.e.*, by setting the DDBT too high), it will reduce the potential for the exercise of supplier-side market power, as suppliers will be unable to increase capacity de-list bid prices in a manner that would increase the auction clearing price above the competitive level.

Similarly, to the extent that the new DDBT calculation method is less likely to significantly *underestimate* the competitive clearing price (*i.e.*, by setting the DDBT too low), it will decrease the unnecessary administrative burden for

⁸² *Id.* at 50.

The Honorable Kimberly D. Bose December 31, 2020 Page 19 of 24

suppliers with de-list bids that, at the supplier's preferred price, would not increase the FCA's clearing price above the competitive level.⁸³

The proposed methodology also is a significant improvement with respect to the third design objective.⁸⁴ It uses only publicly-available inputs and employs a transparent formula to calculate the DDBT. Further, it is robust to changes in market conditions, as it takes account of the most up-to-date supply and demand conditions available as of the time of the DDBT's calculation.

In summary, then, the proposed recalibration method achieves each of the design objectives, and does so in a manner that is a significant improvement over the manual estimation method employed for calculating the DDBT values for the last six FCAs.

F. Explanation of Tariff Changes to Implement the Proposed DDBT Calculation Methodology

The Tariff requirements for the calculation of the DDBT are in Section III.13.1.2.3.1.A of Market Rule 1. That provision currently states the DDBT value that is to be used in each FCA—\$4.30/kW-month—and further requires the ISO to update the value no less often than once every three years and review the updated value with stakeholders. As explained above, the \$4.30/kW-month value was first used in FCA 13, and thus per the current Tariff requirements the value must be recalculated for FCA 16.

The Tariff changes to implement the DDBT Methodology Change replace the current language in Section III.13.1.2.3.1.A with the details of the recalibration method, and indicate that this new methodology will go into effect beginning with FCA 16. The changes further explaining that the new method will be employed each year thereafter to update the DDBT value. The current value in the Tariff—\$4.30/kW-month—will apply for FCA 15 to be held in February of 2021, for a third and final year.

⁸³ *Id.* at 51. Mr. Brewster and Dr. Geissler provide additional information, at 67-70 of the Brewster-Geissler Testimony, on the impacts of the maximum and minimum limits and the margin, explaining with two separate tables (Tables 2 and 3) the impact of the limits and margin, and comparing the absolute percent error of the preliminary DDBT calculation values to the absolute percent error of the final DDBT values under the recalibration method. They explain that in three of the six prior FCAs, the inclusion of the limits and margin caused the final DDBT value to be set further from the FCA clearing price, relative to the initial preliminary DDBT value, and in the remaining three the limits and margin increased the accuracy of the final DDBT. Brewster-Geissler Testimony at 68-70. Nevertheless, as Mr. Brewster and Dr. Geissler explain, *overall* the application of the limits and margin *reduces* the average absolute percent error from 31 percent to 26 percent across the last six FCAs, suggesting that "the inclusion of these adjustments to develop the final DDBT value may better allow the new method to produce DDBT values that approximate the competitive clearing price over a range of market conditions." *Id*.

⁸⁴ *Id.* at 51-52.

The Honorable Kimberly D. Bose December 31, 2020 Page 20 of 24

Given the transparent nature of the calculation method and that the inputs to the calculation are all public, there is no need to review the calculation with stakeholders, and that obligation is struck. The obligation to file the updated value with the Commission is also struck, as the recalibration methodology reflects the hallmarks of a formula rate. Of particular note, the transparent nature of the method and the transparent and readily-accessible inputs to the calculation render the method fixed and predictable, and further prevents the ISO from employing excessive discretion in calculating the DDBT value.⁸⁵

The details of the recalibration method are contained in four sub-sections to Section III.13.1.2.3.1.A, corresponding to the four major steps of the DDBT calculation. Sub-section (a) explains the core calculation, which produces the preliminary DDBT value. It explains that this value is the average of "the Capacity Clearing Price for the Rest-of-Pool Capacity Zone from the immediately preceding Forward Capacity Auction" and "the price at which the total amount of capacity clearing in the immediately preceding Forward Capacity Auction intersects the estimated System-Wide Capacity Demand Curve for the upcoming Forward Capacity Auction." For the clearing price from the preceding FCA, sub-section (a) indicates that a second run of the primary auction-clearing process will be accounted for in determining the price to use, should a second run take place. As discussed above, a central part of the core calculation is the estimate of the demand curve for the upcoming FCA. Sub-section (a) explains that the demand curve will be calculated using the same methodology that the Tariff requires for calculating the FCA's demand curve, which is set forth in Section III.13.2.2.1, and then describes the inputs that are to be used for that calculation, all of which will be made available to stakeholders when the DDBT is published.

Sub-section (b) imposes on the preliminary DDBT value the maximum limit and the minimum limit—*i.e.*, that the value shall not be higher than 75 percent of the Net CONE value for the upcoming FCA, and that the value shall not be lower than 75 percent of the system-wide clearing price from the prior auction. A final clause in this sub-section addresses the potential for the upper and lower limits to conflict. In that case, the upper limit is binding, which is explained by indicating that the lower limit is 75 percent of the last auction's clearing price "except as needed to ensure that it is not higher than 75 percent of the Net CONE value for the upcoming Forward Capacity Auction."

Sub-section (c) contains the formula used to calculate the margin. The value of \$1/kW-month is multiplied by a ratio, which is calculated by first determining the difference between the preliminary DDBT value and 75 percent of Net CONE, and then dividing that value by 75 percent of Net CONE. Thus, as the preliminary DDBT value increases, the ratio value will decrease, producing a smaller margin value, and vice versa.

⁸⁵ See Pub. Utilities Comm'n of State of Cal. v. F.E.R.C., 254 F.3d 250, 254 (D.C. Cir. 2001) ("The Commission's acceptance of formula rates is premised on the rate design's 'fixed, predictable nature,' which both allows a utility to recover costs that may fluctuate over time and prevents a utility from utilizing excessive discretion in determining the ultimate amounts charged to customers.") (internal citations omitted).

The Honorable Kimberly D. Bose December 31, 2020 Page 21 of 24

Sub-section (d) explains how the margin and two limits are applied to calculate the final DDBT value. The limits are applied first to the preliminary value, and then the margin value is added thereafter to produce the final DDBT value for the next auction.

Finally, the Tariff changes require that the ISO publish on its website the final DDBT value, the preliminary value, whether the final value was constrained by either of the two limits, and the margin value. These values must be published to the ISO's website at least five business days before the deadline for capacity suppliers to submit Retirement De-List Bids for their existing capacity (generally in mid-March of the year prior to the FCA). This deadline is the first de-list bid submittal deadline in the qualification process, and thus marks the first time the DDBT value is utilized by participants in determining whether de-list bids must be submitted in advance of the FCA for IMM review.

V. STAKEHOLDER PROCESS

The DDBT Methodology Change was considered through the complete NEPOOL Participant Processes and received almost unanimous support of NEPOOL. Importantly, the proposed Tariff changes filed herein were borne out of collaborative efforts to achieve a better balancing of interests between NEPOOL's diverse membership, the New England States Committee on Electricity ("NESCOE"), and ISO-NE.

At its October 6–8, 2020 meeting, the NEPOOL Markets Committee considered an earlier ISO-NE proposal to modify the DDBT methodology and four amendments to that initial proposal. Two amendments were jointly offered by Dynegy Marketing and Trade LLC (Vistra Energy) (collectively, "Dynegy") and Calpine Energy Services, LP ("Calpine"). Both failed to garner enough requisite support needed for the Markets Committee to recommend its support, with each amendment receiving a 49.90 percent Vote in favor. The New England States Committee on Electricity ("NESCOE") offered the other two amendments, which also failed to achieve sufficient support at the Markets Committee, with each amendment receiving a 33.40 percent Vote in favor. After consideration of those stakeholder-proposed modifications, the Markets Committee then considered but failed to support the ISO's earlier DDBT methodology proposal, with a 44.53 percent Vote in favor.

Given the vote outcome of the Markets Committee and, in an effort to achieve consensus on a new DDBT methodology, representatives from NESCOE, Calpine, and Dynegy (Vistra) worked together to produce a single, consolidated proposal for the Participants Committee's consideration. At the November 5, 2020 Participants Committee meeting, that jointly offered proposal was overwhelmingly approved by NEPOOL, with only one opposition noted during the Participants Committee vote. Refer to ISO's request, the Participants Committee also considered the ISO's earlier DDBT methodology proposal (same one that was considered by the Markets

⁸⁶ NRG Power Marketing LLC opposed the amendment and the following abstentions were recorded: Acadia Center, BP Energy Company ("BP"), Conservation Law Foundation, Cross-Sound Cable ("Cross-Sound"), DTE Energy Trading, Inc. ("DTE"), LIPA, Mercuria Energy America, LLC ("Mercuria"), Natural Resources Defense Council, Sunrun Inc., and Mr. Michael Kuser.

The Honorable Kimberly D. Bose December 31, 2020 Page 22 of 24

Committee). No NEPOOL member voted in favor of that proposal.⁸⁷ Ultimately, the ISO adopted the NEPOOL-approved proposal (i.e., the DDBT Methodology Change), which is filed herein with the overwhelming support of NEPOOL and NESCOE.

VI. ADDITIONAL SUPPORTING INFORMATION

Section 35.13 of the Commission's regulations generally requires public utilities to file certain cost and other information related to an examination of traditional cost-of-service rates. However, the DDBT Methodology Change does not modify a traditional "rate" and the ISO is not a traditional investor-owned utility. Therefore, to the extent necessary, the Filing Parties request waiver of Section 35.13 of the Commission's regulations. Notwithstanding their request for waiver, the Filing Parties submit the following additional information in substantial compliance with relevant provisions of Section 35.13 of the Commission's regulations:

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

- This transmittal letter;
- Blacklined Tariff sections reflecting the revisions submitted in this filing;
- Clean Tariff sections reflecting the revisions submitted in this filing;
- Joint testimony of Matthew Brewster and Christopher Geissler, sponsored solely by the ISO;
- List of governors and utility regulatory agencies in Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont to which a copy of this filing has been sent.

35.13(b)(2) — As set forth in Section I above, the Filing Parties request that the changes become effective on March 2, 2021.

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/participate/participant-asset-listings. A 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, the New England Conference of Public Utility Commissioners, Inc., and to the New England States Committee on Electricity. Their names and addresses are shown in the attached listing. In accordance with Commission rules and practice, there is no need for the Governance Participants

⁸⁷ The following abstentions were recorded: BP, Cross-Sound, DTE, LIPA, Mercuria, the Alternative Resource Sector Small Renewable Generation Group Seat, and Mr. Kuser.

^{88 18} C.F.R. § 35.13 (2014).

The Honorable Kimberly D. Bose December 31, 2020 Page 23 of 24

or the entities identified in the listing to be included on the Commission's official service list in the captioned proceeding unless such entities become intervenors in this proceeding.

- 35.13(b)(4) A description of the materials submitted pursuant to this filing is contained in Section VI of this transmittal letter.
- 35.13(b)(5) The reasons for this filing are discussed in Section IV of this transmittal letter.
- <u>35.13(b)(6)</u> The ISO's approval of the changes is evidenced by this filing. The changes reflect the results of the Participant Processes required by the Participants Agreement and reflect the support of the Participants Committee.
- <u>35.13(b)(7)</u> Neither the ISO nor NEPOOL has knowledge of any relevant expenses or costs of service that have been alleged or judged in any administrative or judicial proceeding to be illegal, duplicative, or unnecessary costs that are demonstrably the product of discriminatory employment practices.
- <u>35.13(b)(8)</u> A form of notice and electronic media are no longer required for filings in light of the Commission's Combined Notice of Filings notice methodology.
- 35.13(c)(1) The changes submitted herein do not modify a traditional "rate," and the statement required under this Commission regulation is not applicable to the instant filing.
- 35.13(c)(2) The ISO does not provide services under other rate schedules that are similar to the wholesale, resale and transmission services it provides under the Tariff.
- 35.13(c)(3) No specifically assignable facilities have been or will be installed or modified in connection with the revision filed herein.

The Honorable Kimberly D. Bose December 31, 2020 Page 24 of 24

VII. CONCLUSION

For the reasons discussed in this transmittal letter, the Filing Parties request that the Commission accept the DDBT Methodology Change to become effective on March 2, 2021.

Respectfully submitted,

ISO NEW ENGLAND INC.

By: /s/ Christopher J. Hamlen

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

Tel: (413) 540-4425 Fax: (413) 535-4379

E-mail: chamlen@iso-ne.com

NEW ENGLAND POWER POOL PARTICIPANTS COMMITTEE

By: /s/ Sebastian M. Lombardi

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

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

Email: slombardi@daypitney.com

III.13.1. Forward Capacity Auction Qualification.

Each resource, or portion thereof, must qualify as a New Generating Capacity Resource (Section III.13.1.1), an Existing Generating Capacity Resource (Section III.13.1.2), a New Import Capacity Resource or Existing Import Capacity Resource (Section III.13.1.3), or a New Demand Capacity Resource or Existing Demand Capacity Resource (Section III.13.1.4). Each resource must be at least 100 kW in size to participate in the Forward Capacity Auction, except for resources registered with the ISO prior to the earliest date that any portion of this Section III.13 becomes effective. An offer may be composed of separate resources, pursuant to the provisions of Section III.13.1.5. Pursuant to the provisions of this Section III.13.1, the ISO shall determine a summer Qualified Capacity and a winter Qualified Capacity for each resource, and an FCA Qualified Capacity for each Existing Generating Capacity Resource, Existing Import Capacity Resource, Existing Demand Capacity Resource, New Generating Capacity Resource, New Import Capacity Resource, and New Demand Capacity Resource.

All Project Sponsors must be Market Participants no later than 30 days prior to the deadline for submitting the FCM Deposit. The Lead Market Participant for a resource participating in a Forward Capacity Auction may not change in the 15 Business Days prior to, or during, that Forward Capacity Auction.

III.13.1.1. New Generating Capacity Resources.

To participate in a Forward Capacity Auction as a New Generating Capacity Resource, a resource or proposed resource must meet the requirements of this Section III.13.1.1.

III.13.1.1.1. Definition of New Generating Capacity Resource.

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

III.13.1.1.1.1. Resources Never Previously Counted as Capacity.

(a) A resource, or a portion thereof, will be considered to have never been counted as a capacity resource if it has not cleared in any previous Forward Capacity Auction.

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

III.13.1.1.1.2. Resources Previously Counted as Capacity.

A resource that has previously been counted as a capacity resource, including a deactivated or retired capacity resource, may elect to participate in the Forward Capacity Auction as a New Generating Capacity Resource, as described in this Section III.13.1.1.1.2. The incremental expenditure required to reactivate a resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) may be included in the calculation of the dollar per kilowatt thresholds in this Section III.13.1.1.1.2. A resource accepted for participation in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section III.13.1.1.1.2 shall participate in the Forward Capacity Auction pursuant to Section III.13.2.3.2(e). A Market Participant that elects to have a resource that has previously been counted as a capacity resource participate in the Forward Capacity Auction as a New Generating Capacity Resource, must notify the ISO when the existing resource ceases to operate and the New Generating Capacity Resource commences operation. If a Market Participant with a resource that has previously been counted as a capacity resource elects, pursuant to Section III.13.3.4(a)(iii), to have the resource that has previously been counted as a capacity resource cover the Capacity Supply Obligation of a New Generating Capacity Resource and the resource that has previously been counted as a capacity resource must take an outage in order for the New Generating Capacity Resource to commence Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff), then the Market Participant must notify the ISO that the outage is for the purpose of the New Generating Capacity

Resource commencing Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff). A resource shall be accepted for participation as a new resource if it complies with one of the following three subsections:

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

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

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

- (a) will result, by the start of the Capacity Commitment Period, in an increase in output less than or equal to the greater of: (i) 20 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction; or (ii) 40 MW; and
- (b) will be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the Handy-Whitman Index of Public Utility Construction Costs reflecting data for the period ending January 1 of the year preceding the start of the qualification process for the relevant Forward Capacity Auction. These investment costs may include the costs associated with reactivating a resource that was previously deactivated pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and in which investment in the resource was undertaken prior to reactivation.
- (c) A Project Sponsor or Lead Market Participant making an election pursuant to this Section III.13.1.1.1.3 must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2 for the incremental amount.

III.13.1.1.3.A. Treatment of New Incremental Capacity and Existing Generating Capacity at the Same Generating Resource.

For incremental summer capacity seeking to participate in the Forward Capacity Auction pursuant to Section III.13.1.1.1.3 or incremental winter capacity that meets the investment thresholds in Section III.13.1.1.1.3 as applied to the resource's winter Qualified Capacity, if the incremental summer or winter capacity does not span the entire Capacity Commitment Period, then the ISO shall match the incremental summer or winter capacity with excess existing winter or summer Qualified Capacity at that same resource, as appropriate, not to exceed the Qualified Capacity of the existing portion of the resource, in order to cover the entire Capacity Commitment Period. This provision shall not apply to Intermittent Power Resources.

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

For purposes of the Forward Capacity Market, de-rated capacity of a resource shall be measured by the difference between the summer Qualified Capacity prior to the de-rating of the resource and the most recent summer demonstration of Seasonal Claimed Capability of a resource, as of the fifth Business Day of October. The owner of a resource previously counted as a capacity resource that has been de-rated by at least 2 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) but by no more than the lesser of 20 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) or 40 MW for three or more years at the time of the Forward Capacity Auction may elect to have the incremental amount of capacity above the capacity level established while de-rated treated as a New Generating Capacity Resource if it demonstrates that it will be reestablished prior to the start of the Capacity Commitment Period and that the investment in the resource for such purposes shall be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The Project Sponsor must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2.2 for the incremental amount of capacity for the relevant Forward Capacity Auction. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the Handy-Whitman Index of Public Utility Construction Costs reflecting data for the period ending January 1 of the year preceding the start of the qualification process for the relevant Forward Capacity Auction. The owner of a resource seeking to have the incremental amount of capacity counted as a New Generating Capacity Resource as provided in this Section, must demonstrate based on historical data that the resource previously operated at a level at least 2 percent above the de-rated amount.

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

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

III.13.1.1.1.6. Treatment of Deactivated and Retired Units.

(a) [Reserved.]

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

III.13.1.1.1.7 Renewable Technology Resources.

To participate in the Forward Capacity Market as a Renewable Technology Resource, a Generating Capacity Resource or an On-Peak Demand Resource (including every Asset that is part of the On-Peak Demand Resource) must satisfy the following requirements:

- (a) receive an out-of-market revenue source supported by a state- or federally-regulated rate, charge or other regulated cost recovery mechanism;
- (b) qualify as a renewable or alternative energy generating resource under any New England state's mandated (either by statute or regulation) renewable or alternative energy portfolio standards as in effect on January 1, 2014, or, in states without a standard, qualify under that state's renewable energy goals as a renewable resource (either by statute or regulation) as in effect on January 1, 2014. The resource must qualify as a renewable or alternative energy generating resource in the New England state in which it is geographically located. A resource physically located in United States federal waters directly adjacent to New England state maritime boundaries and directly interconnecting to the New England system is considered to be geographically located in the state where its Point of Interconnection is located;

- (c) participate in a Forward Capacity Auction for a Capacity Commitment Period beginning on or after June 1, 2018 as a New Generating Capacity Resource or New Demand Capacity Resource pursuant to Section III.13.1.1, and;
- (d) has been designated for treatment as a Renewable Technology Resource pursuant to Section III.13.1.1.2.9.

An Export Bid or Administrative Export De-List Bid may not be submitted for Generating Capacity Resources that assumed a Capacity Supply Obligation by participating in a Forward Capacity Auction as a Renewable Technology Resource.

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

For a resource to qualify as a New Generating Capacity Resource, the resource's Project Sponsor must make two separate submissions to the ISO: First, the Project Sponsor must submit a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Second, the Project Sponsor must submit a New Capacity Qualification Package no later than the New Capacity Qualification Deadline. Each of these submissions is described in more detail in this Section III.13.1.1.2. The Project Sponsor must also have, or in the case of an Import Capacity Resource seeking to qualify with an Elective Transmission Upgrade be associated with, a valid Interconnection Request under Schedules 22, 23 or 25 of Section II of the Transmission, Markets and Services Tariff prior to submitting a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Both the New Capacity Show of Interest Form and the New Capacity Qualification Package are required regardless of the status of the project under the interconnection procedures described in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff. Neither the New Capacity Show of Interest Form nor the New Capacity Qualification Package constitutes an Interconnection Request. A Project Sponsor may withdraw from the qualification process at any time prior to three Business Days before the submission of the FCM Deposit pursuant to Section III.13.1.9.1 by providing written notification of such withdrawal to the ISO. Any withdrawal, whether pursuant to this provision or as determined by the ISO (for example as described in Section III.13.1.1.2.1 or Section III.13.1.9.3), shall be irrevocable. The Project Sponsor of a withdrawn application is subject to reconciliation of its Qualification Process Cost Reimbursement Deposit described in Section III.13.1.9.3. None of the provisions of this Section III.13.1, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, supersedes, replaces, or satisfies any of the requirements of Schedules 22, 23 and 25 of Section II of the

Transmission, Markets and Services Tariff, except as specifically provided thereunder. Determinations by the ISO pursuant to this Section III.13.1.1.2, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, are for purposes of qualification for participation in the Forward Capacity Auction only, and do not constitute a right or approval to interconnect, and do not guarantee the ability to interconnect.

III.13.1.1.2.1. New Capacity Show of Interest Form.

Except as otherwise provided in this Section III.13.1.1.2.1, for each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must submit to the ISO a New Capacity Show of Interest Form as described in this Section III.13.1.1.2.1 during the New Capacity Show of Interest Submission Window. After submission of a New Capacity Show of Interest Form, Material Modification (as defined in Section 4.4 of Schedule 22, Section 1.5 of Schedule 23, or Section 4.4 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff) may not be made to the information contained therein or the New Capacity Show of Interest Form shall be considered withdrawn. No change that may result in a reduction in capacity may be made to a project described in a New Capacity Show of Interest Form or New Capacity Qualification Package between the date that is 150 days before the start of the Forward Capacity Auction and the deadline for qualification determination notifications described in Section III.13.1.1.2.8.

(a) A completed New Capacity Show of Interest Form shall include the following information, to the extent the information is not already provided under an active Interconnection Request under Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff, and other such information necessary to evaluate a project: the project name; the Project Sponsor's contact information; the Project Sponsor's ISO customer status; the date by which the project is expected to achieve Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff); the project address or location, and if relevant, asset identification number; the status of the project under the interconnection procedures described in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff; whether the resource has ever previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010; the capacity (in MW) of the New Generating Capacity Resource; a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21 or some other type); a simple location plan and a one-line diagram of the plant and station facilities, including any known transmission facilities; the location of the

proposed interconnection; and other specific project data as set forth in the New Capacity Show of Interest Form. The ISO may waive the submission of any information not required for evaluation of a project. A completed New Capacity Show of Interest Form shall also specify the Queue Position associated with the project pursuant to Section 4.1 of Schedule 22, Section 1.5 of Schedule 23 or Section 4.1 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff. In the case of a resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource that is supported by an Internal Elective Transmission Upgrade, all Queue Positions associated with the project must be submitted in the New Capacity Show of Interest Form. Submittal of the Interconnection Request may take place prior to the qualification process described here, but no later than the date on which the New Capacity Show of Interest Form is submitted to the ISO; however, the Interconnection Customer Interconnection Request must still be active and consistent with the project described in the New Capacity Show of Interest Form as well as the New Capacity Qualification Package to be submitted as described in Section III.13.1.1.2.2.

- (b) The Project Sponsor must submit with the New Capacity Show of Interest Form, documentation demonstrating that the Project Sponsor has already achieved control of the project site for the duration of the relevant Capacity Commitment Period pursuant to Section III.13.1.1.2.2.1.
- (c) In the New Capacity Show of Interest Form, the Project Sponsor must indicate if the New Generating Capacity Resource is incremental capacity associated with a resource that previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010 as discussed in Section III.13.1.1.1.3, or if the New Generating Capacity Resource is incremental capacity associated with a resource previously listed as a capacity resource that has been de-rated for three or more years at the time of the Forward Capacity Auction, as discussed in Section III.13.1.1.1.4.
- (d) [Reserved.]
- (e) With the New Capacity Show of Interest Form, the Project Sponsor must submit the Qualification Process Cost Reimbursement Deposit, as described in Section III.13.1.9.3.

III.13.1.1.2.2. New Capacity Qualification Package.

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

III.13.1.1.2.2.1. Site Control.

For all Forward Capacity Auctions and reconfiguration auctions, the Project Sponsor must achieve, prior to the close of the New Capacity Show of Interest Submission Window, control of the project site for the duration of the relevant Capacity Commitment Period, which shall be as defined in Section 4.1 of Schedule 22, Section 1.5 of Schedule 23 or Section 4.1 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff.

III.13.1.1.2.2.2. Critical Path Schedule.

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

(a) **Major Permits**. In the New Capacity Qualification Package, the Project Sponsor must list all major permits required for the project, and for each major permit, the Project Sponsor must list the agency requiring the permit, the date on which application for the permit is expected to be made, and the expected date of approval. Major permits shall include, but are not limited to: (i) all federal and state permits; and (ii) local, regional, and town permits. The permitting and installation process associated with any major ancillary infrastructure (such as new gas pipelines, new water supply systems, or large storage tanks) should be included in this portion of the New Capacity Qualification Package.

- (b) **Project Financing Closing**. In the New Capacity Qualification Package, the Project Sponsor shall provide (i) the estimated dollar amount of required project financing; (ii) the expected sources of that financing; and (iii) the expected closing date(s) for the project financing.
- (c) Major Equipment Orders. In the New Capacity Qualification Package, the Project Sponsor must provide a list of all of the major components necessary for the project, and the date or dates on which all major components necessary for the project have been or are expected to be ordered. Although the specific technology will determine the list of major components to be included, the list shall include, to the extent applicable: (i) electric generators which may include equipment such as fuel cells or solar photovoltaic equipment; (ii) turbines; (iii) step-up transformers; (iv) relay panels (v) distributed control systems; and (vi) any other single piece of equipment or system such as a cooling water system, steam generation, steam handling system, water treatment system, fuel handling system or emissions control system that is not included as a sub-component of other equipment listed in this Section III.13.1.1.2.2.2(c) and that accounts for more than five percent of the total project cost. For an Import Capacity Resource associated with an Elective Transmission Upgrade that has not yet achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, major components shall also include, to the extent applicable, transmission facilities and associated substation equipment.
- (d) **Substantial Site Construction**. In the New Capacity Qualification Package, the Project Sponsor must provide the approximate date on which the amount of money expended on construction activities occurring on the project site is expected to exceed 20 percent of construction financing costs.
- (e) **Major Equipment Delivery**. In the New Capacity Qualification Package, the Project Sponsor must provide the dates on which the major equipment described in subsection (d) above has been or is scheduled to be delivered to the project site.
- (f) **Major Equipment Testing**. In the New Capacity Qualification Package, the Project Sponsor must provide the date or dates on which each piece of major equipment described in subsection (c) above is scheduled to undergo testing, including major systems testing, as appropriate for the specific technology to establish its suitability to allow, in conjunction with other major equipment, subsequent operation of the project in accordance with the design capacity of the resource and in accordance with Good Utility Practice. The test(s) shall include those conducted at the point at which the operation of the

major equipment will be determined to be in compliance with the requirements of the engineering or purchase specifications.

- (g) **Commissioning**. In the New Capacity Qualification Package, the Project Sponsor must provide the date on which the project is expected to have demonstrated the level of performance specified in the New Capacity Show of Interest Form and in the New Capacity Qualification Package.
- (h) Commercial Operation. In the New Capacity Qualification Package, the Project Sponsor must provide the date by which the project is expected to achieve Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff) and/or the date by which the Project Sponsor expects to be ready to demonstrate to the ISO that the Demand Capacity Resource described in the New Demand Capacity Resource Qualification Package has achieved its full demand reduction value. This date must be no later than the start of the Capacity Commitment Period associated with the Forward Capacity Auction.

III.13.1.1.2.2.3. Offer Information.

- (a) All New Generating Capacity Resources that might submit offers in the Forward Capacity Auction at prices below the relevant Offer Review Trigger Price must include in the New Capacity Qualification Package the lowest price at which the resource requests to offer capacity in the Forward Capacity Auction and supporting documentation justifying that price as competitive in light of the resource's costs (as described in Section III.A.21). This price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that Section.
- (b) The Project Sponsor for a New Generating Capacity Resource must indicate in the New Capacity Qualification Package if an offer from the New Generating Capacity Resource may be rationed. A Project Sponsor may specify a Rationing Minimum Limit to which offers may be rationed. Without such indication, offers will only be accepted or rejected in whole. This rationing election shall apply for the entire Forward Capacity Auction.
- (c) By submitting a New Capacity Qualification Package, the Project Sponsor certifies that an offer from the New Generating Capacity Resource will not include any anticipated revenues the resource is

expected to receive for its capacity cost as a Qualified Generator Reactive Resource pursuant to Schedule 2 of Section II of the Transmission, Markets and Services Tariff.

III.13.1.1.2.2.4. Capacity Commitment Period Election.

In the New Capacity Qualification Package, the Project Sponsor must specify whether, if its New Capacity Offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to six additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. For incremental capacity qualified pursuant to Section III.13.1.1.1.3.A, this election shall apply to both the incremental amount of capacity and the existing Qualified Capacity matched to the incremental capacity at the same generating resource. If no such election is made in the New Capacity Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Capacity Offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Capacity Offer clears. If a New Capacity Offer clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.1.2.2.4.

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

- (a) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2 (re-powering), Section III.13.1.1.1.3 (incremental capacity), or Section III.13.1.1.1.4 (de-rated capacity), the Project Sponsor must include in the New Capacity Qualification Package documentation of the costs associated with the project in sufficient detail to allow the ISO to determine that the relevant cost threshold (described in Sections III.13.1.1.1.2(b), III.13.1.1.1.3(b), and III.13.1.1.1.4) will be met.
- (b) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2(c) (environmental compliance), the Project Sponsor must include in the New Capacity Qualification Package: (i) a detailed description of the specific

regulations that it is seeking to comply with and the permits that it must obtain; and (ii) documentation of the costs associated with the project in sufficient detail to allow the ISO to determine that the relevant cost threshold (described in Section III.13.1.1.1.2(c)) will be met.

(c) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Sections III.13.1.1.1.2, III.13.1.1.1.3, or III.13.1.1.1.4, the Project Sponsor must include in the New Capacity Qualification Package detailed information showing how and when the resource will shed its Capacity Supply Obligation to accommodate necessary work on the facility, if necessary. The Project Sponsor must also include the shedding of its Capacity Supply Obligation as an additional milestone in the critical path schedule described in Section III.13.1.1.2.2.2.

III.13.1.1.2.2.6. Additional Requirements for New Generating Capacity Resources that are Intermittent Power Resources.

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

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

III.13.1.1.2.3. Initial Interconnection Analysis.

(a) For each New Generating Capacity Resource, the ISO shall perform an initial interconnection analysis, including an analysis of overlapping interconnection impacts, based on the information provided in the New Capacity Show of Interest Form and shall determine the amount of capacity that the resource could provide by the start of the associated Capacity Commitment Period. The initial interconnection

analysis shall be performed consistent with the criteria and conditions described in ISO New England Planning Procedures, and will include, but will not be limited to, a power flow analysis and a short circuit analysis. No initial interconnection analysis is required where the total requested Qualified Capacity of a New Generating Capacity Resource pursuant to Sections III.13.1.1.2, III.13.1.1.3, III.13.1.1.4, or III.13.1.1.6 can be realized without a Material Modification (as defined in Section 4.4 of Schedule 22, Section 1.5 of Schedule 23 and Section 4.4 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff). The ISO will perform the initial interconnection analysis in the form of a group study that will (i) include all the projects that have submitted a New Capacity Show of Interest Form to participate in the same Capacity Commitment Period (as described in Section 4.1 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff) and (ii) exclude any existing capacity that will be retired as of the start of the same Capacity Commitment Period. Participation in an initial interconnection analysis is a requirement for obtaining Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service in a manner that meets the Capacity Capability Interconnection Standard in accordance with the provisions in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff.

- (b) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide the entire amount of capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period, the New Generating Capacity Resource's Qualified Capacity values may be adjusted accordingly, as described in Section III.13.1.1.2.5.
- (c) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period and the New Generating Capacity Resource can not provide any capacity without those facilities and upgrades, the resource shall not be accepted for participation in the Forward Capacity Auction. In this case, the ISO will provide an explanation of its determination in the qualification determination notification, discussed in Section III.13.1.1.2.8.

- (d) If as a result of the initial interconnection analysis, the ISO determines that the New Generating Capacity Resource can provide all or some of the capacity indicated in the New Capacity Show of Interest Form by the start of the Capacity Commitment Period, and if the New Generating Capacity Resource is accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1, then in the qualification determination notification, discussed in Section III.13.1.1.2.8, the ISO, after consultation with the applicable Transmission Owner(s) or Elective Transmission Upgrade Interconnection Customer as appropriate, shall include a list of the facilities that may be required to complete the interconnection and time required to construct those facilities by the start of the associated Capacity Commitment Period.
- (e) Where, as a result of the initial interconnection analysis, the ISO concludes, after consultation with the Project Sponsor and the applicable Transmission Owner(s) or Elective Transmission Upgrade Interconnection Customer, as appropriate, that the capacity indicated in the New Capacity Show of Interest Form can not be interconnected by the commencement of the Capacity Commitment Period, the Forward Capacity Market qualification process for that resource shall be terminated and the ISO will notify the Project Sponsor of such termination.
- (f) Where, as a result of the initial interconnection analysis, the ISO determines that because of overlapping interconnection impacts, New Generating Capacity Resources that are otherwise accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1 cannot provide the full amount of capacity that they each would otherwise be able to provide (in the absence of the other relevant Existing Generating Capacity Resources and New Generating Capacity Resources seeking to qualify for the Forward Capacity Auction), those New Generating Capacity Resources will be accepted for participation in the Forward Capacity Auction on the basis of their Queue Position, as described in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff, with priority given to resources that entered the queue earlier. Resources with lower priority in the queue may be accepted partially. Starting with the fourth auction, a New Generating Capacity Resource that meets the requirements of this Section III.13.1, but that would not be accepted for participation in the Forward Capacity Auction as a result of overlapping interconnection impacts with another resource having a higher priority in the queue may be accepted for participation in the Forward Capacity Auction as a Conditional Qualified New Resource, as described in Section III.13.2.3.2(f), provided that the resource having a higher priority in the queue is not a resource offering capacity into the Forward Capacity Auction pursuant to Section III.13.2.3.2(e).

III.13.1.1.2.4. Evaluation of New Capacity Qualification Package.

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

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

III.13.1.1.2.5. Qualified Capacity for New Generating Capacity Resources.

III.13.1.1.2.5.1. New Generating Capacity Resources Other Than Intermittent Power Resources.

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

III.13.1.1.2.5.2. [Reserved]

III.13.1.1.2.5.3. New Generating Capacity Resources that are Intermittent Power Resources.

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

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

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

III.13.1.1.2.6. [Reserved.]

III.13.1.1.2.7. Opportunity to Consult with Project Sponsor.

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

periods established for the qualification process. In addition, the ISO or the Project Sponsor may confer to seek clarification, to gather additional necessary information, or to address questions or concerns prior to the ISO's final determination and notification of qualification.

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

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

- (a) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the initial interconnection analysis made pursuant to Section III.13.1.1.2.3, and if not accepted, an explanation of the reasons the New Generating Capacity Resource was not accepted in the initial interconnection analysis;
- (b) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the New Capacity Qualification Package evaluation made pursuant to Section III.13.1.1.2.4, and if not accepted, an explanation of the reasons the New Generating Capacity Resource's New Capacity Qualification Package was not accepted;
- (c) if accepted for participation in the Forward Capacity Auction, a list of the facilities that may be required to complete the interconnection for purposes of providing capacity and time required to construct those facilities by the start of the associated Capacity Commitment Period, as discussed in Section III.13.1.1.2.3(d);
- (d) if accepted for participation in the Forward Capacity Auction, the New Generating Capacity Resource's summer Qualified Capacity and winter Qualified Capacity, as determined pursuant to Section III.13.1.1.2.5;
- (e) if accepted for participation in the Forward Capacity Auction, but subject to the provisions of Section III.13.1.1.2.3(f) (where not all New Generating Capacity Resources can be interconnected due to their combined effects on the New England Transmission System), a description of how the New Generating Capacity Resource shall participate in the Forward Capacity Auction, including, for the fourth and future auctions: (i) whether the resource shall participate as a Conditional Qualified New Resource;

- (ii) for the notification to a Conditional Qualified New Resource, the Queue Position of the associated resource with higher queue priority; and (iii) for the notification to a resource with higher queue priority than a Conditional Qualified New Resource, the Queue Position of the Conditional Qualified New Resource; and
- (f) if accepted for participation in the Forward Capacity Auction and requesting to submit offers at prices below the relevant Offer Review Trigger Price pursuant to Section III.13.1.1.2.2.3, the Internal Market Monitor's determination regarding whether the requested offer price is consistent with the long run average costs of that New Generating Capacity Resource.

III.13.1.1.2.9 Renewable Technology Resource Election.

A Project Sponsor or Market Participant may not elect Renewable Technology Resource treatment for the FCA associated with a Capacity Commitment Period beginning on or after June 1, 2025.

A Project Sponsor or Market Participant electing Renewable Technology Resource treatment for the FCA Qualified Capacity of a New Generating Capacity Resource or New Demand Capacity Resource shall submit a Renewable Technology Resource election form no later than two Business Days after the date on which the ISO provides qualification determination notifications pursuant to Section III.13.1.1.2.8 or Section III.13.1.4.1.1.6. Only the portion of the FCA Qualified Capacity of the resource that meets the requirements of Section III.13.1.1.1.7 is eligible for treatment as a Renewable Technology Resource.

Renewable Technology Resource elections may not be modified or withdrawn after the deadline for submission of the Renewable Technology Resource election form.

The submission of a Renewable Technology Resource election that satisfies the requirements of Section III.13.1.1.1.7 will invalidate a prior multi-year Capacity Supply Obligation and Capacity Clearing Price election for the same resource made pursuant to Section III.13.1.4.1.1.2.7 or Section III.13.1.1.2.2.4 for a Forward Capacity Auction.

III.13.1.1.2.10 Determination of Renewable Technology Resource Qualified Capacity.

- (a) If the total FCA Qualified Capacity of Renewable Technology Resources exceeds the cap specified in subsections (b), (c), (d) and (e) the qualified capacity value of each resource shall be prorated by the ratio of the cap divided by the total FCA Qualified Capacity. The ISO shall notify the Project Sponsor or Market Participant, as applicable, of the Qualified Capacity value of its resource no more than five Business Days after the deadline for submitting Renewable Technology Resource elections.
- (b) The cap for the Capacity Commitment Period beginning on June 1, 2018 is 200 MW.
- (c) The cap for the Capacity Commitment Period beginning on June 1, 2019 is 400 MW minus the amount of Capacity Supply Obligations acquired by Renewable Technology Resources that are New Capacity Resources pursuant to Section III.13.2 in the prior Capacity Commitment Period.
- (d) The cap for each Capacity Commitment Period beginning on June 1, 2020 or June 1, 2021 is 600 MW minus the amount of Capacity Supply Obligations acquired by Renewable Technology Resources that are New Capacity Resources pursuant to Section III.13.2 in the prior two Capacity Commitment Periods.
- (e) The cap for each Capacity Commitment Period beginning on June 1, 2022 or June 1, 2023 or June 1, 2024 is 514 MW minus the cumulative amount of Capacity Supply Obligations acquired by Renewable Technology Resources that are New Capacity Resources in the first or second run of the primary auction-clearing process pursuant to Section III.13.2 for each Capacity Commitment Period that begins on or after June 1, 2021.

III.13.1.2. Existing Generating Capacity Resources.

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

III.13.1.2.1. Definition of Existing Generating Capacity Resource.

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

III.13.1.2.1.1. Attributes of Existing Generating Capacity Resources.

For purposes of Forward Capacity Auction qualification, a Market Participant may not change any Existing Generating Capacity Resource attribute (including but not limited to the resource's status as an Intermittent Power Resource) in the period beginning 20 Business Days prior to the Existing Capacity Retirement Deadline and ending with the conclusion of the Forward Capacity Auction. Outside of this period, any such change must be accompanied by documentation justifying the change.

III.13.1.2.1.2 Rationing Minimum Limit.

No later than 120 days before the Forward Capacity Auction Market Participants may specify a Rationing Minimum Limit for an Existing Generating Capacity Resource.

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

III.13.1.2.2.1.1. Summer Qualified Capacity.

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

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

III.13.1.2.2.1.2. Winter Qualified Capacity.

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

III.13.1.2.2.2. Existing Generating Capacity Resources that are Intermittent Power Resources.

The summer and winter Qualified Capacity for an Existing Generating Capacity Resource that is an Intermittent Power Resource shall be calculated as follows:

III.13.1.2.2.2.1. Summer Qualified Capacity for an Intermittent Power Resource.

(a) With regard to any Forward Capacity Auction qualification process, for each of the previous five summer periods, the ISO shall determine the median of the Intermittent Power Resource's net output in the Summer Intermittent Reliability Hours. If there are less than five full summer periods since the Intermittent Power Resource achieved FCM Commercial Operation, the ISO shall determine the median

of the Intermittent Power Resource's net output in each of the previous summer periods, or portion thereof, since the Intermittent Power Resource achieved FCM Commercial Operation.

- (b) The Intermittent Power Resource's summer Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.1(a).
- (c) The Summer Intermittent Reliability Hours shall be hours ending 1400 through 1800 each day of the summer period (June through September) and all summer period hours in which there was a system-wide Capacity Scarcity Condition and if the Intermittent Power Resource was in an import-constrained Capacity Zone, all Capacity Scarcity Conditions in that Capacity Zone.
- (d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource there are no previous positive summer Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource had not yet achieved FCM Commercial Operation, then the Existing Generating Capacity Resource's summer Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

III.13.1,2.2.2.2. Winter Qualified Capacity for an Intermittent Power Resource.

- (a) With regard to any Forward Capacity Auction qualification process, for each of the previous five winter periods, the ISO shall determine the median of the Intermittent Power Resource's net output in the Winter Intermittent Reliability Hours. If there are less than five full winter periods since the Intermittent Power Resource achieved FCM Commercial Operation, the ISO shall determine the median of the Intermittent Power Resource's net output in each of the previous winter periods, or portion thereof, since the Intermittent Power Resource achieved FCM Commercial Operation.
- (b) The Intermittent Power Resource's winter Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.2(a).
- (c) The Winter Intermittent Reliability Hours shall be hours ending 1800 and 1900 each day of the winter period (October through May) and all winter period hours in which there was a system-wide Capacity Scarcity Condition and if the Intermittent Power Resource was in an import-constrained Capacity Zone, all Capacity Scarcity Conditions in that Capacity Zone.

(d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource there are no previous positive winter Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource had not yet achieved FCM Commercial Operation, then the Existing Generating Capacity Resource's winter Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

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

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

Capacity shall be calculated as described in Section III.13.1.2.2.1.2, except that no data from the time period prior to the New Generating Capacity Resource's FCM Commercial Operation date shall be used to determine the winter Qualified Capacity associated with the Existing Generating Capacity Resource.

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

Where the most recent summer Seasonal Claimed Capability, as of the fifth Business Day in October, of an Existing Generating Capacity Resource (other than a Settlement Only Resource or an Intermittent Power Resource) is below its summer Qualified Capacity, as determined pursuant to Section III.13.1.2.2.1.1, by:

- (1) for Capacity Commitment Periods beginning prior to June 1, 2023, more than the lesser of 20 percent of that summer Qualified Capacity or 40 MW;
- (2) for Capacity Commitment Periods beginning on or after June 1, 2023, more than the lesser of:
 - (i) the greater of 10 percent of that summer Qualified Capacity or two MW, or;
 - (ii) 10 MW;

then the Lead Market Participant must elect one of the two treatments described in this Section III.13.1.2.2.4 by the Existing Capacity Retirement Deadline. If the Lead Market Participant makes no election, or elects treatment pursuant to Section III.13.1.2.2.4(c) and fails to meet the associated requirements, then the treatment described in Section III.13.1.2.2.4(a) shall apply.

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

Capacity Auction. For an Existing Generating Capacity Resource subject to this election, the critical path schedule monitoring provisions of Section III.13.3 shall apply.

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

Where an Existing Generating Capacity Resource (other than a Settlement Only Resource) meets the requirements of Section III.13.1.1.1.3(a) but not the requirements of Section III.13.1.1.1.3(b), the Lead Market Participant may elect to have the Existing Generating Capacity Resource's summer Qualified Capacity be the sum of [the median of that Existing Generating Capacity Resource's positive summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in October of each year, calculated in a manner consistent with Section III.13.1.2.2.1.1] plus [the amount of incremental capacity as described in Section III.13.1.1.1.3(a)]; provided, however, that the Lead Market Participant must abide by all other provisions of this Section III.13 applicable to a resource that is a New Generating Capacity Resource pursuant to Section III.13.1.1.1.3. Such an election must be made in writing and must be received by the ISO no later than the close of the New Capacity Show of Interest Submission Window. If the incremental amount of capacity seeking to participate in the Forward Capacity Auction meets the requirements of this Section, but the incremental amount of capacity does not span the entire Capacity Commitment Period, then the ISO shall match the incremental amount of capacity with excess Qualified Capacity at that same resource, not to exceed the Qualified Capacity of the existing portion of the resource, in order to cover the entire Capacity Commitment Period. This provision shall not apply to Intermittent Power Resources.

III.13.1.2.2.5.1. [Reserved.]

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

Demand Capacity Resource or Existing Import Capacity Resource Having a

Higher Summer Qualified Capacity than Winter Qualified Capacity.

Where an Existing Generating Capacity Resource, Existing Demand Capacity Resource, or Existing Import Capacity Resource (other than an Intermittent Power Resource) has a summer Qualified Capacity that exceeds its winter Qualified Capacity, both as calculated pursuant to this Section III.13.1.2.2, then that resource must either: (i) offer its summer Qualified Capacity as part of an offer composed of separate resources, as discussed in Section III.13.1.5; or (ii) have its FCA Qualified Capacity administratively set by the ISO to the lesser of its summer Qualified Capacity and winter Qualified Capacity.

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

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

III.13.1.2.3.1. Existing Capacity Retirement Package and Existing Capacity Qualification Package.

A resource that previously has been deactivated pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and seeks to reactivate and participate in the Forward Capacity Market as an Existing Generating Capacity Resource must submit a reactivation plan no later than 10 Business Days before the Existing Capacity Retirement Deadline, as described in Section III.13.1.1.1.6(b). All Permanent De-List Bids and Retirement De-List Bids in the Forward Capacity Auction must be detailed in an Existing Capacity Retirement Package submitted to the ISO no later than the Existing Capacity Retirement Deadline. All Static De-List Bids, Export Bids and Administrative Export De-List Bids in the Forward Capacity Auction must be detailed in an Existing Capacity Qualification Deadline. Permanent De-List Bids and Retirement De-List Bids may not be modified or withdrawn after the Existing Capacity Retirement Deadline, except as provided for in Section III.13.1.2.4.1. All Static De-List Bids, Export Bids, and Administrative Export De-List Bids submitted in the qualification process may not be modified or withdrawn after the Existing Capacity Qualification Deadline, except as provided for in

Section III.13.1.2.3.1.1. An Existing Generating Capacity Resource may not submit a Static De-List Bid, Export Bid, Administrative Export De-List Bid, Permanent De-List Bid, or Retirement De-List Bid for an amount of capacity greater than its summer Qualified Capacity, unless the submittal is for the entire resource. Where a resource elected pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.1.1.2.7 to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, the capacity associated with any resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply. For a single resource, a Lead Market Participant may combine a Static De-List Bid, an Export Bid, and an Administrative Export De-List Bid; neither a Permanent De-List Bid nor a Retirement De-List Bid may be combined with any other type of de-list or export bid.

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

III.13.1.2.3.1.A Dynamic De-List Bid Threshold.

For the fifteenth Forward Capacity Auction (for the Capacity Commitment Period beginning June 1, 2024), The Dynamic De-List Bid Threshold for a Forward Capacity Auction is \$4.30/kW-month. For each Forward Capacity Auction thereafter, the Dynamic De-List Bid Threshold shall be calculated as described below in this Section III.13.1.2.3.1.A, and shall be published to the ISO's website no later than 5 Business Days before the Existing Capacity Retirement Deadline. This publication shall include the preliminary value calculated pursuant to subsection (a) below, whether the preliminary value was constrained by either of the limitations described in subsection (b) below, the margin value as calculated pursuant to subsection (c) below, and the final value as calculated pursuant to subsection (d) below.

(a) Subject to the limitations described in subsection (b) below, a preliminary value of the Dynamic De-List Bid Threshold shall be calculated as the average of: (i) the Capacity Clearing Price for the Rest-

of-Pool Capacity Zone from the immediately preceding Forward Capacity Auction (provided, however, that if there is a second run of the primary auction-clearing process pursuant to Section III.13.2.5.2.1(d), the resulting Rest-of-Pool Capacity Zone clearing price from that run shall be used instead); and (ii) the price at which the total amount of capacity clearing in the immediately preceding Forward Capacity Auction intersects the estimated System-Wide Capacity Demand Curve for the upcoming Forward Capacity Auction. For this purpose, the estimated System-Wide Capacity Demand Curve shall be constructed, in the same manner as described in Section III.13.2.2.1, using the system-wide Marginal Reliability Impact values from the immediately preceding Forward Capacity Auction, the most recent estimate of the Installed Capacity Requirement (net of HQICCs) for the upcoming Forward Capacity Auction, and the Net CONE and Forward Capacity Auction Starting Price for the upcoming Forward Capacity Auction.

- (b) The preliminary value of the Dynamic De-List Bid Threshold shall not be higher than 75 percent of the Net CONE value for the upcoming Forward Capacity Auction. The preliminary value of the Dynamic De-List Bid Threshold shall not be lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A, except as needed to ensure that it is not higher than 75 percent of the Net CONE value for the upcoming Forward Capacity Auction.
- (c) A margin value shall be calculated using the following formula:

$$Margin = \$1/kW\text{-}month \times \left[\frac{\left(75\% \times Net\ CONE_{upcoming\ FCA}\right) - DDBT_{preliminary}}{\left(75\% \times Net\ CONE_{upcoming\ FCA}\right)} \right]$$

Auction shall be equal to the preliminary value of the Dynamic De-List Bid Threshold calculated pursuant to Sections III.13.1.2.3.1.A(a) and III.13.1.2.3.1.A(b) plus the margin value calculated pursuant to Section III.13.1.2.3.1.A(c). The Dynamic De-List Bid Threshold shall be recalculated for the Capacity Commitment Period beginning on June 1, 2025 and no less often than once every three years thereafter. When the Dynamic De-List Bid Threshold is recalculated, the Internal Market Monitor will review the results of the recalculation with stakeholders.

III.13.1.2.3.1.1. Static De-List Bids.

A Lead Market Participant with an Existing Capacity Resource, or a portion thereof, seeking to specify a price below which it would not accept a Capacity Supply Obligation for that resource, or a portion thereof, at prices at or above the Dynamic De-List Bid Threshold during a single Capacity Commitment

Period may submit a Static De-List Bid in the associated Forward Capacity Auction qualification process. A Static De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Rationing Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. Each Static De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five price-quantity pairs). The curve may in no case increase the quantity offered as the price decreases. All Static De-List Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Static De-List Bids are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional documentation described in that section. With the submission of a Static De-List Bid, the Lead Market Participant must notify the ISO if the Existing Capacity Resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period (except for necessary audits or tests).

No later than seven days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.2.4(b), a Lead Market Participant that submitted a Static De-List Bid may:
(a) lower the price of any price-quantity pair of a Static De-List Bid, provided that the revised price is greater than or equal to the Dynamic De-List Bid Threshold, or; (b) withdraw any price-quantity pair of a Static De-List Bid.

III.13.1.2.3.1.2. [Reserved.]

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 a Renewable Technology 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 qualification process. An Export Bid may not result in a resource's Capacity Supply Obligation being less than its Rationing 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 at or above the Dynamic De-List Bid Threshold are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional information described in that Section. Each Export Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five price-quantity pairs) associated

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

III.13.1.2.3.1.4. Administrative Export De-List Bids.

An Existing Generating Capacity Resource other than an Intermittent Power Resource or a Renewable Technology Resource subject to a multiyear contract to sell capacity outside of the New England Control Area during the Capacity Commitment Period that either: (i) cleared as an Export Bid in a previous Forward Capacity Auction for a Capacity Commitment Period within the duration of the contract; or (ii) entered into a contract prior to April 30, 2007 to sell capacity outside of the New England Control Area during the Capacity Commitment Period, may submit an Administrative Export De-List Bid in the associated Forward Capacity Auction qualification process. An Administrative Export De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Rationing Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. Unless reviewed as an Export Bid in a previous Forward Capacity Auction, an Administrative Export De-List Bid is subject to a reliability review prior to clearing in a Forward Capacity Auction, as described in Section III.13.2.5.2.5, and is subject to review by the Internal Market Monitor in the first Forward Capacity Auction in which it participates, pursuant to Section III.13.1.7. Both the reliability review and the review by the Internal Market Monitor shall be conducted once and shall remain valid for the multiyear contract period. Each Administrative Export De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, must be associated with a specific Existing Generating Capacity Resource, and must indicate the quantity of capacity subject to the bid. The Existing Capacity Qualification Package for each Administrative Export De-List Bid must also specify the interface over which the capacity will be exported, and must include documentation demonstrating a contractual obligation to sell capacity outside of the New England Control Area during the whole Capacity Commitment Period. Administrative Export De-List Bids shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.5.2.4.

III.13.1.2.3.1.5. Permanent De-List Bids and Retirement De-List Bids.

(a) A Lead Market Participant with an Existing Capacity Resource seeking to specify a price at or below which it would not accept a Capacity Supply Obligation permanently for all or part of a Generating

Capacity Resource beginning at the start of a particular Capacity Commitment Period may submit a Permanent De-List Bid in the associated Forward Capacity Auction qualification process.

- (b) A Lead Market Participant with an Existing Capacity Resource seeking to specify a price at or below which it would retire all or part of a Generating Capacity Resource from all New England Markets beginning at the start of a particular Capacity Commitment Period may submit a Retirement De-List Bid in the associated Forward Capacity Auction qualification process.
- No Permanent De-List Bid or Retirement De-List Bid may result in a resource's Capacity Supply Obligation being less than its Rationing Minimum Limit unless the Permanent De-List Bid or Retirement De-List Bid is for the entire resource. Each Permanent De-List Bid and Retirement De-List Bid must be detailed in an Existing Capacity Retirement Package submitted to the ISO no later than the Existing Capacity Retirement Deadline, and must be in the form of a curve (up to five price-quantity pairs) associated with a specific Existing Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. Permanent De-List Bids and Retirement De-List Bids are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2.1 and must include the additional documentation described in that section. Once submitted, no Permanent De-List Bid or Retirement De-List Bid may be withdrawn, except as provided in Section III.13.1.2.4.1.

III.13.1.2.3.1.5.1. Reliability Review of Permanent De-List Bids and Retirement De-List Bids During the Qualification Process.

During the qualification process, the ISO will review the following de-list bids to determine if the resource is needed for reliability: (1) Internal Market Monitor-accepted Permanent De-List Bids and Internal Market Monitor-accepted Retirement De-List Bids that are at or above the Forward Capacity Auction Starting Price; and (2) Permanent De-List Bids and Retirement De-List Bids for which the Lead Market Participant has opted to have the resource reviewed for reliability as described in Section III.13.1.2.4.1(a) or Section III.13.1.2.4.1(b). The reliability review will be conducted according to Section III.13.2.5.2.5, except as follows:

(a) Permanent De-List Bids and Retirement De-List Bids that cannot be priced (for example, due to the expiration of an operating license) will be reviewed first.

- (b) System needs associated with Permanent De-List Bids and Retirement De-List Bids for resources found needed for reliability reasons pursuant to this Section III.13.1.2.3.1.5.1 will be reviewed with the Reliability Committee during the month of August following the issuance of retirement determination notifications pursuant to Section III.13.1.2.4(a). The Lead Market Participant shall be notified as soon as practicable following the ISO's consultation with the Reliability Committee that the capacity associated with a Permanent De-List Bid or Retirement De-List Bid is needed for reliability reasons.
- (c) If the capacity associated with a Permanent De-List Bid or Retirement De-List Bid is needed for reliability reasons pursuant to this Section III.13.1.2.3.1.5.1, the de-list bid shall be rejected and the resource shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(c) and compensated according to Section III.13.2.5.2.5, unless the resource declines to be retained for reliability, as provided in Section III.13.1.2.3.1.5.1(d).
- (d) No later than the fifth Business Day in the month of September following the review of system needs with the Reliability Committee per (b) above, a Lead Market Participant may notify the ISO that it declines to provide the associated capacity for reliability. Such an election will be binding. A resource for which a Lead Market Participant has made such an election will not be eligible for compensation pursuant to Sections III.13.2.5.2.5.1 or III.13.2.5.2.5.2.
- (e) Where a resource is determined not to be needed for reliability or where a Lead Market Participant notifies the ISO that it declines to provide capacity for reliability pursuant to Section III.13.1.2.3.1.5.1(d), the capacity associated with the Permanent De-List Bid or Retirement De-List Bid will be treated as follows:
 - (i) For a Retirement De-List Bid at or above the Forward Capacity Auction Starting Price, or a Permanent De-List Bid or Retirement De-List Bid for which a Lead Market Participant has elected to retire the resource pursuant to Section III.13.1.2.4.1(a), the portion of the resource subject to the de-list bid will be retired as permitted by applicable law coincident with the commencement of the Capacity Commitment Period for which the de-list bid was submitted, as described in Section III.13.2.5.2.5.3(a).
 - (ii) For a Permanent De-List Bid at or above the Forward Capacity Auction Starting Price for which a Lead Market Participant has not elected to retire the resource pursuant to Section

III.13.1.2.4.1(a), the portion of the resource subject to the de-list bid will be permanently de-listed coincident with the commencement of the Capacity Commitment Period for which the de-list bid was submitted, as described in Section III.13.2.5.2.5.3(b).

(iii) For a Permanent De-List Bid or Retirement De-List Bid for which a Lead Market Participant has elected conditional treatment pursuant to Section III.13.1.2.4.1(b), the de-list bid will continue to receive conditional treatment as described in Section III.13.1.2.4.1(b), Section III.13.2.3.2(b)(ii), and Section III.13.2.5.2.1.

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

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

III.13.1.2.3.1.6.1. Submission of Cost Data.

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

III.13.1.2.3.1.6.2. [Reserved.]

III.13.1.2.3.1.6.3. Internal Market Monitor Review of Stations having Common Costs.

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

(i) Calculate the average Asset-Specific Going Forward Costs of each asset at the Station.

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

The Internal Market Monitor will adjust the set of composite costs to ensure a monotonically non-increasing set of bids as follows: any asset with a composite cost that is greater than the composite cost of the asset with the lowest composite cost and that has average Asset-Specific Going Forward Costs that are less than its composite costs will have its composite cost set equal to that of the asset with the lowest composite cost. The bids of the asset with the lowest composite cost and of any assets whose composite costs are so adjusted will be considered a single non-rationable bid for use in the Forward Capacity Auction.

The Internal Market Monitor will compare a de-list bid developed using the adjusted composite costs to the de-list bid submitted by the Existing Generating Capacity Resource that is associated with a Station having Common Costs. If the Internal Market Monitor determines that the submitted de-list bid is less than or equal to the bid developed using the adjusted composite costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). If the Internal Market Monitor determines that the submitted de-list bid is greater than the bid developed using the adjusted composite costs or is not consistent with the submitted supporting cost data, then the Internal Market Monitor will establish an Internal Market Monitor-determined or Internal Market Monitor—accepted price for the bid as described in Section III.13.1.2.3.2.1.

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

The Internal Market Monitor shall review bids for Existing Capacity Resources as follows.

III.13.1.2.3.2.1. Static De-List Bids and Export Bids, Permanent De-List Bids, and Retirement De-List Bids at or Above the Dynamic De-List Bid Threshold.

The Internal Market Monitor shall review each Static De-List Bid and each Export Bid at or above the Dynamic De-List Bid Threshold to determine whether the bid is consistent with: (1) the Existing Capacity Resource's net going forward costs (as determined pursuant to Section III.13.1.2.3.2.1.2.A); (2) reasonable expectations about the resource's Capacity Performance Payments (as determined pursuant to Section III.13.1.2.3.2.1.3); (3) reasonable risk premium assumptions (as determined pursuant to Section III.13.1.2.3.2.1.4); and (4) the resource's reasonable opportunity costs (as determined pursuant to Section III.13.1.2.3.2.1.5).

The Internal Market Monitor shall review each Permanent De-List Bid greater than 20 MW that is at or above the Dynamic De-List Bid Threshold and each Retirement De-List Bid greater than 20 MW that is at or above the Dynamic De-List Bid Threshold to determine whether the bid is consistent with: (1) the net present value of the resource's expected cash flows (as determined pursuant to Section III.13.1.2.3.2.1.2.B); (2) reasonable expectations about the resource's Capacity Performance Payments (as determined pursuant to Section III.13.1.2.3.2.1.3); and (3) the resource's reasonable opportunity costs (as determined pursuant to Section III.13.1.2.3.2.1.5). If more than one Permanent De-List Bid or Retirement De-List Bid is submitted by a single Lead Market Participant or its Affiliates (as used in Section III.A.24), the Internal Market Monitor shall review each such bid at or above the Dynamic De-List Bid Threshold if the sum of all such bids at or above the Dynamic De-List Bid Threshold is greater than 20 MW. The Internal Market Monitor shall review each Permanent De-List Bid and each Retirement De-List Bid submitted at any price pursuant to Section III.13.2.5.2.1(b) if the sum of the Permanent De-List Bids and Retirement De-List Bids submitted by the Lead Market Participant or its Affiliates (as used in Section III.A.24) is greater than 20 MW. Permanent De-List Bids and Retirement De-List Bids that are not reviewed by the Internal Market Monitor shall be included in the retirement determination notification described in Section III.13.1.2.4(a) and in the filing made to the Commission as described in Section III.13.8.1(a).

Sufficient documentation and information about each bid component must be included in the Existing Capacity Retirement Package or the Existing Capacity Qualification Package to allow the Internal Market Monitor to make the requisite determinations. If a Permanent De-List Bid or Retirement De-List Bid is submitted pursuant to Section III.13.2.5.2.1(b), all relevant updates to previously submitted documentation and information must be provided to support the newly submitted price and allow the

Internal Market Monitor to make updated determinations. The updated information may include a request to discontinue the Permanent De-List Bid or Retirement De-List Bid such that it will not be entered into the Forward Capacity Auction, in which case the update must include sufficient supporting information on the nature of resource investments that were undertaken, or other materially changed circumstances, to allow the Internal Market Monitor to determine whether discontinuation is appropriate.

The entire de-list submittal shall be accompanied by an affidavit executed by a corporate officer attesting to the accuracy of its content, including reported costs, 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 the reasonableness of the expectations and assumptions regarding Capacity Performance Payments, cash flows, opportunity costs, and risk premiums, and shall be subject to audit upon request by the ISO.

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

The Internal Market Monitor may seek additional information from the Lead Market Participant (including information about the other existing or potential new resources controlled by the Lead Market Participant) after the qualification deadline to address any questions or concerns regarding the data submitted, as appropriate. The Internal Market Monitor shall review all relevant information (including data, studies, and assumptions) to determine whether the bid is consistent with the resource's net going forward costs, reasonable expectations about the resource's Capacity Performance Payments, reasonable risk premium assumptions, and reasonable opportunity costs. In making this determination, the Internal Market Monitor shall consider, among other things, industry standards, market conditions (including published indices and projections), resource-specific characteristics and conditions, portfolio size, and consistency of assumptions across that portfolio.

III.13.1.2.3.2.1.1.1. Review of Static De-List Bids and Export Bids.

The Internal Market Monitor shall review Static De-List Bids and Export Bids and, after due consideration and consultation with the Lead Market Participant, as appropriate, shall develop an Internal Market Monitor-accepted Static De-List Bid or an Internal Market Monitor-accepted Export Bid. The Internal Market Monitor-accepted Static De-List Bid and Internal Market Monitor-accepted Export Bid shall be equal to the Static De-List Bid or Export Bid submitted by the Lead Market Participant unless the de-list bid price(s) submitted by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted de-list bid price(s) for the same de-list bid. If the de-list bid price(s) submitted

by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted delist bid price(s), the Internal Market Monitor shall calculate an Internal Market Monitor-accepted Static De-List Bid or Internal Market-Monitor-accepted Export Bid that is consistent with the sum of the resource's net going forward costs plus reasonable expectations about the resource's Capacity Performance Payments plus reasonable risk premium assumptions plus reasonable opportunity costs.

If an Internal Market Monitor-determined price is established for a Static De-List Bid or an Export Bid, 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(c) shall include an explanation of the Internal Market Monitor-determined price based on the Internal Market Monitor review and the resource's net going forward costs, reasonable expectations about the resource's Capacity Performance Payments, reasonable risk premium assumptions, and reasonable opportunity costs as determined by the Internal Market Monitor.

III.13.1.2.3.2.1.1.2. Review of Permanent De-List Bids and Retirement De-List Bids.

The Internal Market Monitor shall review those Permanent De-List Bids and Retirement De-List Bids identified in Section III.13.1.2.3.2.1 and, after due consideration and consultation with the Lead Market Participant, as appropriate, shall develop an Internal Market Monitor-accepted Permanent De-List Bid or an Internal Market Monitor-accepted Retirement De-List Bid. The Internal Market Monitor-accepted Permanent De-List Bid and Internal Market Monitor-accepted Retirement De-List Bid shall be equal to the Permanent De-List Bid or Retirement De-List Bid submitted by the Lead Market Participant unless the de-list bid price(s) submitted by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted de-list bid price(s) for the same de-list bid. If the de-list bid price(s) submitted by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted de-list bid price(s), the Internal Market Monitor shall calculate an Internal Market Monitor-accepted Permanent De-List Bid or Internal Market-Monitor-accepted Retirement De-List Bid that is consistent with the sum of the net present value of the resource's expected cash flows plus reasonable expectations about the resource's Capacity Performance Payments plus reasonable opportunity costs.

The retirement determination notification described in Section III.13.1.2.4(a) and the filing made to the Commission as described in Section III.13.8.1(a) shall include an explanation of the Internal Market Monitor-accepted price and the Internal Market Monitor determination on any request to discontinue the Permanent De-List Bid or Retirement De-List Bid.

III.13.1.2.3.2.1.2.A. Static De-List Bid and Export Bid Net Going Forward Costs.

The Lead Market Participant for an Existing Capacity Resource that submits a Static De-List Bid or an Export Bid at or above the Dynamic De-List Bid Threshold that is to be reviewed by the Internal Market Monitor shall report expected net going forward costs for the applicable Capacity Commitment Period in a manner and format specified by the Internal Market Monitor, and may supplement this information with other evidence. A Static De-List Bid or Export Bid at or above the Dynamic De-List Bid Threshold shall be considered consistent with the Existing Capacity Resource's net going forward costs based on a review of the data submitted in the following formula.

Net Going Forward Costs =

(GFC – IMR) x InfIndex

 $(CQ_{Summer}, kw) \times (12 months)$

Where:

GFC = annual going forward costs, in dollars. These are the expected costs and capital expenditures that might otherwise be avoided or not incurred if the resource were not subject to the obligations of a resource with a Capacity Supply Obligation during the Capacity Commitment Period (i.e., maintaining a constant condition of being ready to respond to commitment and dispatch orders). Costs that are not avoidable in a single Capacity Commitment Period and costs associated with the production of energy are not to be included. Service of debt is not a going forward cost. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only in the absence of a Capacity Supply Obligation may be included. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only if the resource were not participating in the energy and ancillary services markets may not be included, except in the case of a resource that has indicated in the submission of a Static De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period.

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

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

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

Where: "i" is the most recent reported 4- Year expected inflation number published by the Federal Reserve Bank of Cleveland at the beginning of the qualification period. The specific value to be used shall be specified by the ISO and available to the Lead Market Participant.

III.13.1.2.3.2.1.2.B Permanent De-List Bid and Retirement De-List Bid Net Present Value of Expected Cash Flows.

The Lead Market Participant for an Existing Capacity Resource that submits a Permanent De-List Bid or Retirement De-List Bid that is to be reviewed by the Internal Market Monitor shall report all expected costs, revenues, prices, discount rates and capital expenditures in a manner and format specified by the Internal Market Monitor, and may supplement this information with other evidence. The Internal Market Monitor will review the Lead Market Participant's submitted data to ensure that it is consistent with overall market conditions and reflects expected values.

The Internal Market Monitor will adjust any data that are inconsistent with overall market conditions or do not reflect expected values. The Internal Market Monitor shall enter all relevant expected costs, revenues, prices, discount rates and capital expenditures into a capital budgeting model and shall determine the net present value of the Existing Capacity Resource's expected cash flows as follows:

The net present value of the Existing Capacity Resource's expected cash flows is equal to (i) the net present value of the Existing Capacity Resource's net annual expected cash flows over the resource's remaining economic life (as determined pursuant to Section III.13.1.2.3.2.1.2.C) plus the net present

value of the resource's expected terminal value, using the resource's discount rate, divided by (ii) the product of the resource's Qualified Capacity (in kilowatts) and 12 months.

The Existing Capacity Resource's net annual expected cash flow for the first Capacity Commitment Period of the resource's remaining economic life is the resource's expected annual net operating profit excluding expected capacity revenues less its expected capital expenditures in the Capacity Commitment Period.

The Existing Capacity Resource's net annual expected cash flow for each of the subsequent Capacity Commitment Periods of the resource's remaining economic life is the resource's expected annual net operating profit less its expected capital expenditures in the Capacity Commitment Period.

Where:

Expected net operating profit, in dollars, is the Lead Market Participant's expected annual profit that might otherwise be avoided or not accrued if the resource were not subject to the obligations of a listed capacity resource during the Capacity Commitment Period. Expected labor, maintenance, taxes, insurance, administrative and other normal expenses that can be avoided or not incurred if the resource is retired or permanently de-listed may be included. Service of debt is not an avoidable cost and may not be included.

Expected capacity revenues, in dollars, are the forecasted annual expected capacity revenues based on the Lead Market Participant's forecasted expected capacity prices for each of the subsequent Capacity Commitment Periods of the resource's remaining economic life. The Lead Market Participant shall provide the Internal Market Monitor with documentation supporting the forecasted expected capacity prices. The supporting documentation must include a detailed description and sources of the Lead Market Participant's assumptions about expected resource additions, resource retirements, estimated Installed Capacity Requirements, estimated Local Sourcing Requirements, expected market conditions, and any other assumptions used to develop the forecasted expected capacity price in each Capacity Commitment Period.

If the Internal Market Monitor determines the Lead Market Participant has not provided adequate supporting documentation for the forecasted expected capacity prices, the Internal Market Monitor will

replace the Lead Market Participant's forecasted expected capacity prices with the Internal Market Monitor's estimate thereof in each of the subsequent Capacity Commitment Periods of the resource's remaining economic life.

Expected capital expenditures, in dollars, are the Lead Market Participant's expected capital investments that might otherwise be avoided or not incurred if the resource were not subject to the obligations of a listed capacity resource during the Capacity Commitment Periods.

Expected terminal value, in dollars, for resources with five years or less of remaining economic life, is the Lead Market Participant's expected revenue less expected costs associated with retiring or permanently de-listing the resource. For resources with more than five years of remaining economic life, the expected terminal value in the fifth year of the evaluation period is the Lead Market Participant's expected revenue less expected costs associated with retiring or permanently de-listing the resource at the end of the resource's economic life plus the net present value of the Existing Capacity Resource's net annual expected cash flows from the sixth year of the evaluation period through the end of the resource's remaining economic life, using the resource's discount rate.

Discount rate is a value reflecting the Lead Market Participant's weighted average cost of capital for the Existing Capacity Resource adjusted to reflect the risk to cash flows calculated pursuant to the net present value of expected cash flows analysis in this Section III.13.1.2.3.2.1.2.B.

The Lead Market Participant shall provide the Internal Market Monitor with documentation supporting the weighted average cost of capital for the Existing Capacity Resource adjusted for risk.

The supporting documentation must include a detailed description and sources of the Lead Market Participant's assumptions associated with the cost of capital, risks and any other assumptions used to develop the weighted average cost of capital for the Existing Capacity Resource adjusted for risk.

If the Internal Market Monitor determines the Lead Market Participant has not provided adequate supporting documentation for the weighted average cost of capital for the Existing Capacity Resource adjusted for risk, the Lead Market Participant has included risks not associated with cash flows calculated pursuant to the net present value of expected cash flows analysis in this Section III.13.1.2.3.2.1.2.B or the Lead Market Participant has submitted costs, revenues, capital expenditures or prices that are not reflective of expected values, the Internal Market Monitor will replace the Lead Market Participant's discount rate with a value determined by the Internal Market Monitor.

III.13.1.2.3.2.1.2.C Permanent De-List Bid and Retirement De-List Bid Calculation of Remaining Economic Life.

The Internal Market Monitor shall calculate the Existing Capacity Resource's remaining economic life, using evaluation periods ranging from one to five years. For each evaluation period, the Internal Market Monitor will calculate the net present value of (a) the annual expected net operating profit minus annual expected capital expenditures assuming the Capacity Clearing Price for the first year is equal to the Forward Capacity Auction Starting Price and (b) the expected terminal value of the resource at the end of the given evaluation period. The economic life is the maximum evaluation period in which a resource's net present value is non-negative. However, effective April 9, 2020, beginning with the sixteenth Forward Capacity Auction, the economic life is the evaluation period in which a resource's net present value is maximized.

III.13.1.2.3.2.1.3. Expected Capacity Performance Payments.

The Lead Market Participant for an Existing Capacity Resource that submits a Static De-List Bid or an Export Bid, Permanent De-List Bid, or Retirement De-List Bid at or above the Dynamic De-List Bid Threshold that is to be reviewed by the Internal Market Monitor shall also provide documentation separately detailing the expected Capacity Performance Payments for the resource. This documentation must include expectations regarding the applicable Capacity Balancing Ratio, the number of hours of reserve deficiency, and the resource's performance during reserve deficiencies.

III.13.1.2.3.2.1.4. Risk Premium.

The Lead Market Participant for an Existing Capacity Resource that submits a Static De-List Bid, or an Export Bid at or above the Dynamic De-List Bid Threshold that is to be reviewed by the Internal Market Monitor shall also provide documentation separately detailing any risk premium included in the bid. This documentation should address all components of physical and financial risk reflected in the bid, including, for example, catastrophic events, a higher than expected amount of reserve deficiencies, and performing scheduled maintenance during reserve deficiencies. Any risk that can be quantified and analytically supported and that is not already reflected in the formula for net going forward costs described in Section III.13.1.2.3.2.1.2.A may be included in this risk premium component. In support of the resource's risk premium, the Lead Market Participant may also submit an affidavit from a corporate officer attesting that the risk premium submitted is the minimum necessary to ensure that the overall level

of risk associated with the resource's participation in the Forward Capacity Market is consistent with the participant's corporate risk management practices.

III.13.1.2.3.2.1.5. Opportunity Costs.

To the extent that an Existing Capacity Resource submitting a Static De-List Bid or an Export Bid, Permanent De-List Bid or Retirement De-List Bid at or above the Dynamic De-List Bid Threshold has additional opportunity costs that are not reflected in the net going forward costs, net present value of expected cash flows, expected Capacity Performance Payments, discount rate, or risk premium components of the bid, the Lead Market Participant must include in the Existing Capacity Qualification Package evidence supporting such costs. Opportunity costs associated with major repairs necessary to restore decreases in capacity as described in Section III.13.1.2.2.4, capital projects required to operate the plant as a capacity resource or other uses of the resource shall be considered, provided such costs are substantiated by evidence of a repair plan, documented business plan and fundamental market analysis, or other independent and transparent trading index or indices as applicable. Substantiation of opportunity costs relying on sales in reconfiguration auctions or risk aversion premiums shall not be considered sufficient justification.

III.13.1.2.3.2.2. [Reserved.]

III.13.1.2.3.2.3. Administrative Export De-List Bids.

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

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

A Lead Market Participant may submit a Static De-List Bid for up to the megawatt amount that the Lead Market Participant expects will not be physically available due to the difference between the summer Qualified Capacity at 90 degrees and the expected rating of the resource at 100 degrees. The ISO shall verify during the qualification process that the rating is accurate. Such Static De-List Bids may be entered

into the Forward Capacity Market at prices up to and including the Forward Capacity Auction Starting Price, subject to validation of the physical limit. Static De-List Bids for reductions in ratings due to ambient air conditions shall not be subject to the review described in Section III.13.1.2.3.2 and need not include documentation for that purpose.

III.13.1.2.3.2.5. Static De-List Bid Incremental Capital Expenditure Recovery Schedule.

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

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

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

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

Where:

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

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

- III.13.1.2.4. Retirement Determination Notification for Existing Capacity and

 Qualification Determination Notification for Existing Capacity; Right to

 Increase Retirement De-List Bid or Permanent De-List Bid up to IMM
 determined substitution auction test price.
- (a) No later than five Business Days before the Existing Capacity Qualification Deadline, the ISO shall send notification to the Lead Market Participant that submitted each Permanent De-List Bid, Retirement De-List Bid and substitution auction test price concerning the result of the Internal Market Monitor's review conducted pursuant to Section III.13.1.2.3.2 and Section III.13.2.8.3.1A. This retirement determination notification shall not include the results of the reliability review pursuant to Sections III.13.1.2.3.1.5.1 or III.13.2.5.2.5. For auctions associated with a Capacity Commitment Period that begins on or after June 1, 2023, within five Business Days of the issuance of the retirement determination notification, a Lead Market Participant that submitted a Retirement De-List Bid or a Permanent De-List Bid and a substitution auction demand bid for the resource associated with the de-list bid, may make the following adjustments:
- (i) for a Retirement De-List Bid, if, but for the limits in Section III.13.1.2.3.2.1.1.2 on adjusting a Market Participant-submitted Retirement De-List Bid, the Internal Market Monitor would have calculated a Retirement De-List Bid price that is higher than the Market Participant-submitted de-list bid price and the Market Participant-submitted de-list bid is less than the Internal Market Monitor-determined substitution auction test price multiplied by 0.9, the Market Participant may increase the de-list bid price up to the minimum of (x) the Internal Market Monitor-determined substitution auction test price multiplied by 0.9 and (y) the higher Retirement De-List Bid price that the Internal Market Monitor would have calculated; (ii) for a Permanent De-List Bid, if, but for the limits in Section III.13.1.2.3.2.1.1.2 on adjusting a Market Participant-submitted Permanent De-List Bid, the Internal Market Monitor would have calculated a Permanent De-List Bid price that is higher than the Market Participant-submitted de-list bid price and the Market Participant-submitted de-list bid is less than the Internal Market Monitor-determined substitution auction test price multiplied by 0.9, the Market Participant may increase the de-list bid price up to the minimum of (x) the Internal Market Monitor-determined substitution auction test price multiplied by 0.9 and (y) the higher Permanent De-List Bid price that the Internal Market Monitor would have calculated.

(b) No later than 127 days before the Forward Capacity Auction, the ISO shall send notification to the Lead Market Participant that submitted each Static De-List Bid and Export Bid concerning the result of the Internal Market Monitor's de-list bid review conducted pursuant to Section III.13.1.2.3.2. The qualification determination shall not include the results of the reliability review pursuant to Section III.13.2.5.2.5.

III.13.1.2.4.1. Participant-Elected Retirement or Conditional Treatment.

No later than five Business Days after the issuance by the ISO of the retirement determination notification described in Section III.13.1.2.4(a), a Lead Market Participant that submitted a Permanent De-List Bid or Retirement De-List Bid may make an election pursuant to Section III.13.1.2.4.1(a) or Section III.13.1.2.4.1(b). If the Lead Market Participant does not make an election pursuant to Section III.13.1.2.4.1(a) or Section III.13.1.2.4.1(b), the prices provided by the Internal Market Monitor in the retirement determination notifications shall be the finalized prices used in the Forward Capacity Auction as described in Section III.13.2.3.2(b) (unless otherwise directed by the Commission).

- (a) A Lead Market Participant may elect to retire the resource, or portion thereof, for which it has submitted a Permanent De-List Bid or Retirement De-List Bid. The capacity associated with a Permanent De-List Bid or Retirement De-List Bid subject to this election will not be subject to reliability review and will be retired pursuant to Section III.13.2.5.2.5.3(a); provided, however, that when making the retirement election pursuant to this Section III.13.1.2.4.1(a) the Lead Market Participant may opt to have the resource reviewed for reliability pursuant to Section III.13.1.2.3.1.5.1, in which case the Lead Market Participant may have the opportunity (but will not be obligated) to provide capacity from the resource if the ISO determines that the resource is needed for reliability reasons, as described in Section III.13.1.2.3.1.5.1(d).
- (b) A Lead Market Participant may elect conditional treatment for the Permanent De-List Bid or Retirement De-List Bid. The capacity associated with a Permanent De-List Bid or Retirement De-List Bid subject to this election will be treated as described in Section III.13.2.3.2(b)(ii), Section III.13.2.5.2.1, and Section III.13.2.5.2.5.3; provided, however, that in making this election the Lead Market Participant may opt to have the resource reviewed for reliability pursuant to Section III.13.1.2.3.1.5.1, in which case the Lead Market Participant may have the opportunity (but will not be obligated) to provide capacity from the resource if the ISO determines that the resource is needed for reliability reasons, as described in Section III.13.1.2.3.1.5.1(d).

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

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

III.13.1.3. Import Capacity.

The qualification requirements for import capacity shall depend on whether the import capacity is an Existing Import Capacity Resource or a New Import Capacity Resource. Both Existing Import Capacity Resources and New Import Capacity Resources clearing in the Forward Capacity Auction must be backed by one or more External Resources or by an external Control Area throughout the relevant Capacity Commitment Period. An external demand resource may not be an Existing Import Capacity Resource or a New Import Capacity Resource. External nodes shall be established and mapped to Capacity Zones pursuant to the provisions in Attachment K to Section II of the Transmission, Markets and Services Tariff.

An Elective Transmission Upgrade with an Interconnection Request for Capacity Network Import Interconnection Service under Schedule 25 of Section II of the Transmission, Markets and Services Tariff shall be included in the FCM (1) after it has established a contractual association with an Import Capacity Resource and that Import Capacity Resource has met the Forward Capacity Market qualification requirements or (2) after it has met the requirements of an Elective Transmission Upgrade with Long

Lead Time Facility treatment pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff. An external node for such an Elective Transmission Upgrade will be modeled for participation in the Forward Capacity Market after the Import Capacity Resource meets the requirements to participate in the FCA. The Qualified Capacity of an Import Capacity Resource associated with an Elective Transmission Upgrade shall not exceed the Capacity Network Import Interconnection Service Interconnection Request. In order for an Elective Transmission Upgrade to maintain its Capacity Network Import Interconnection Service, an associated Import Capacity Resource must meet the Forward Capacity Market qualification requirements and offer into each Forward Capacity Auction. Otherwise, the Capacity Network Import Interconnection Service will revert to Network Import Interconnection Service for the portion of the Capacity Network Import Interconnection Service for which no Import Capacity Resource is offered into the Forward Capacity Auction and the Elective Transmission Upgrade's Interconnection Agreement will be revised. The provisions in Sections III.13.1.3.5.4, permitting a Capacity Commitment Period Election, and in Section III.13.1.3.5.8, permitting a rationing election, shall apply to a New Import Capacity Resource associated with an Elective Transmission Upgrade seeking to reestablish Capacity Network Import Interconnection Service if the threshold to be treated as a new resource in Section III.13.1.1.1.4 is met. If the threshold to be treated as a new increment in Section III.13.1.1.1.3 is met, only the increment will be eligible for the provisions in Sections III.13.1.3.5.4, permitting a Capacity Commitment Period Election, and in Section III.13.1.3.5.8, permitting a rationing election.

III.13.1.3.1. Definition of Existing Import Capacity Resource.

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

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

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

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

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

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

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

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

a New Import Capacity Resource.

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

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

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

III.13.1.3.3.A Qualification Process for Existing Import Capacity Resources that are not associated with an Elective Transmission Upgrade with Capacity Network Import Interconnection Service.

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

- (a) The Qualified Capacity shall be the lesser of the multi-year contract values as documented in the new resource qualification determination notification and the capacity clearing in the Forward Capacity Auction to which the new resource qualification determination notification applied.
- (b) The rationing election described in Section III.13.1.2.3.1 shall not apply.
- qualify to receive the treatment described in Section III.13.2.7.3A for the duration of the contracts as listed. For each Forward Capacity Auction after the first Forward Capacity Auction, in order for an Existing Import Capacity Resource associated with a contract listed below to qualify for the treatment described in Section III.13.2.7.3A, no later than 10 Business Days prior to the Existing Capacity Retirement Deadline, the Market Participant submitting the Existing Import Capacity Resource must also submit to the ISO documentation verifying that the contract will remain in effect throughout the Capacity Commitment Period and that it has not been amended. For the first Forward Capacity Auction, Existing Import Capacity Resources associated with contracts listed in the table below are qualified to receive the treatment described in Section III.13.2.7.3A.

Contract Description

MW

Contract End Date

NYPA: NY — NE: CMEEC	13.2	8/31/2025
NYPA: NY — NE: MMWEC	53.3	8/31/2025
NYPA: NY — NE: Pascoag	2.3	8/31/2025
NYPA: NY— NE: VELCO	15.3	8/31/2025
	84.1	
VJO: Highgate — NE	Up to 225	10/31/2016
VJO: Highgate — NE (extension)	Up to 6	October 2020
(beginning 11/01/2016)		
VJO: Phase I/II — NE	Up to 110	10/31/2016

In addition to the review described in Section III.13.1.2.3.2, the Internal Market Monitor shall review each bid from Existing Import Capacity Resources. A bid from an Existing Import Capacity Resource shall be rejected if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, and the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)).

III.13.1.3.3.B. Qualification Process for Existing Import Capacity Resources that are associated with an Elective Transmission Upgrade with Capacity Import Interconnection Service.

Existing Import Capacity Resources associated with an Elective Transmission Upgrade with Capacity Import Interconnection Service pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff shall be subject to the same qualification process as Existing Generating Capacity Resources as described in Section III.13.1.2.3, except the Qualified Capacity shall be the lesser of the multi-year contract values as documented in the new resource qualification determination notification and the capacity clearing in the Forward Capacity Auction to which the new resource qualification determination notification applied.

III.13.1.3.4. Definition of New Import Capacity Resource.

Capacity not associated with a multi-year contract entered into before the New Capacity Qualification

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

Area for the whole Capacity Commitment Period, but that meets the requirements of Section

III.13.1.3.5.1, shall participate in the Forward Capacity Auction as a New Import Capacity Resource. For capacity associated with a multi-year contract entered into before the New Capacity Qualification

Deadline to provide capacity in the New England Control Area from outside the New England Control Area for a period including the whole Capacity Commitment Period, or capacity from an External Resource that is owned or directly controlled by the Lead Market Participant and which is committed for at least two whole consecutive Capacity Commitment Periods by the Lead Market Participant in the New Capacity Qualification Package, if the import capacity has not cleared in a previous Forward Capacity Auction, then the import capacity shall participate in the Forward Capacity Auction as a New Import Capacity Resource.

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

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

III.13.1.3.5.1. Documentation of Import.

For each New Import Capacity Resource, the Project Sponsor submitting the import capacity (a) must also submit: (i) documentation of a one-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the entire Capacity Commitment Period, including documentation of the MW value of the contract; (ii) documentation of a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the contract period including the entire Capacity Commitment Period, including documentation of the MW value of the contract; (iii) proof of ownership or direct control over one or more External Resources that will be used to back the New Import Capacity Resource during the Capacity Commitment Period, including information to establish the summer and winter ratings of the resource(s) backing the import; or (iv) documentation for system-backed import capacity that the import capacity will be supported by the Control Area and that the energy associated with that system-backed import capacity will be afforded the same curtailment priority as that Control Area's native load. For each New Import Capacity Resource, the Project Sponsor must specify the interface over which the capacity will be imported. The Project Sponsor must indicate whether the import is associated with any investment in transmission that increases New England's import capability or is associated with an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Import Interconnection Service pursuant to Schedule 25 of Section II of the Transmission, Markets and Services

Tariff that has not yet achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff. The Project Sponsor must submit a contract confirming its association with the Elective Transmission Upgrade Interconnection Customer and the ISO will confirm that relationship. If the import will be backed by a single new External Resource, the Project Sponsor submitting the import capacity must also submit a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21.1 or some other type).

(b) To qualify for Capacity Commitment Periods prior to the Capacity Commitment Period associated with the Forward Capacity Auction for which the import capacity is qualifying, the Project Sponsor must submit documentation of one or more one-year contracts for each prior Capacity Commitment Period, entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the entire Capacity Commitment Period, including documentation of the MW value of the contract(s); the Project Sponsor must also satisfy the relevant requirements of Sections III.13.1.3.5.1(a), III.13.1.3.5.2, III.13.1.9, and III.13.3.1.1.

III.13.1.3.5.2. Import Backed by Existing External Resources.

If the New Import Capacity Resource will be backed by one or more External Resources existing at the time of the Forward Capacity Auction and the capacity will be imported over an interface that has achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Project Sponsor shall instead submit a description of how the New Import Capacity Resource will meet its Capacity Supply Obligation in the Capacity Commitment Period(s) for which it seeks to qualify.

If the New Import Capacity Resource will be backed by one or more External Resources existing at the time of the Forward Capacity Auction and the capacity will be imported over an interface that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall apply in addition to the requirement that the Project Sponsor submit a description of how the New Import Capacity Resource will meet its Capacity Supply Obligation in the Capacity Commitment Period(s) for which it seeks to qualify.

The description must indicate specifically which External Resources will back the New Import Capacity Resource during the Capacity Commitment Period, and if those External Resources are not owned or controlled directly by the Project Sponsor, the description must include a commitment that the External Resources will have sufficient capacity that is not obligated outside the New England Control Area to fully satisfy the New Import Capacity Resource's potential Capacity Supply Obligation during the Capacity Commitment Period and demonstrate how that commitment will be met.

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

If the New Import Capacity Resource will be backed by an external Control Area and the capacity will be imported over an interface that has achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Project Sponsor shall instead submit system load and capacity projections for the external Control Area showing sufficient excess capacity during the Capacity Commitment Period to back the New Import Capacity Resource.

If the New Import Capacity Resource will be backed by an external Control Area and the capacity will be imported over an Elective Transmission Upgrade and the capacity will be imported over an interface that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall apply in addition to the requirement that the Project Sponsor submit system load and capacity projections for the external Control Area showing sufficient excess capacity during the Capacity Commitment Period to back the New Import Capacity Resource for the length of the multi-year contract.

III.13.1.3.5.3.1. Imports Crossing Intervening Control Areas.

The preceding rules define requirements associated with the import of capacity from a Control Area, or resources located in a Control Area, directly adjacent to the New England Control Area. Imports of capacity from a Control Area or resources located in a Control Area where such import crosses an intervening Control Area or Control Areas shall comply with the following additional requirements: (1) For imports crossing a single intervening Control Area, the Project Sponsor entering the import contract shall demonstrate, as detailed in the ISO New England Manuals, that the remote Control Area will afford

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

III.13.1.3.5.4. Capacity Commitment Period Election.

The provisions regarding Capacity Commitment Period election (Section III.13.1.1.2.2.4) shall only apply to a New Import Capacity Resource associated with an Elective Transmission Upgrade with a Capacity Network Import Interconnection Service Interconnection Request. All other New Import Capacity Resources clearing in the Forward Capacity Auction shall have a Capacity Supply Obligation and shall receive payments only for the one-year Capacity Commitment Period associated with that Forward Capacity Auction.

III.13.1.3.5.5. Initial Interconnection Analysis.

The provisions regarding initial interconnection analysis (Section III.13.1.1.2.3) shall not apply unless the capacity will be imported over an Elective Transmission Upgrade pursuing Capacity Network Import Interconnection Service pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff.

III.13.1.3.5.5.A. Cost Information.

The offer information described in Section III.13.1.1.2.2.3 and Section III.A.21.2 may be submitted in the form of a curve (up to five price-quantity pairs) associated with a specific New Import Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. Each price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that Section.

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

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

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

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

No later than seven days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.1.2.8, a Lead Market Participant with a New Import Capacity Resource (other than a New Import Capacity Resource that is (i) backed by a single new External Resource and associated with an investment in transmission that increases New England's import capability, or (ii) associated with an Elective Transmission Upgrade) that submitted a request to submit offers in the Forward Capacity Auction at prices that are below the relevant Offer Review Trigger Price as described in Sections III.13.1.1.2.2.3 and III.13.1.3.5 may: (a) lower the requested offer price of any price-quantity pair submitted to the ISO pursuant to Section III.13.1.1.2.2.3, provided that the revised price is greater than or equal to the Dynamic De-List Bid Threshold, or (b) withdraw any price-quantity pair of a requested offer price.

III.13.1.3.5.8. Rationing Election.

New Import Capacity Resources are subject to rationing except New Import Capacity Resource associated with an Elective Transmission Upgrade with a Capacity Network Import Interconnection Service Interconnection Request, which are eligible for the rationing election described in Section III.13.1.1.2.2.3(b).

III.13.1.4. Demand Capacity Resources.

To participate in a Forward Capacity Auction as a Demand Capacity Resource, a resource must meet the requirements of this Section III.13.1.4. Each Demand Capacity Resource shall be a minimum of 100 kW. An Active Demand Capacity Resource comprises one or more Demand Response Resources located in a single Dispatch Zone. An On-Peak Demand Resource or Seasonal Peak Demand Resource comprises one or more Assets located in a single Load Zone. An On-Peak Demand Resource or Seasonal Peak Demand Resource may consist of Load Management measures, Distributed Generation measures, or a combination thereof, or may consist solely of Energy Efficiency measures. A Demand Capacity Resource may include an end-use customer facility with a Net Supply Capability of 5 MW or more only if the facility's Net Supply Capability does not exceed its Maximum Facility Load. Demand Capacity Resources must comply with all applicable federal, state, and local regulatory, siting, and tariff requirements, including interconnection tariff requirements related to siting, interconnection, and operation of the Demand Capacity Resource. Demand Capacity Resources are not permitted to submit import or export bids or Administrative Export De-List Bids.

III.13.1.4.1. Definition of New Demand Capacity Resource.

A New Demand Capacity Resource is an Active Demand Capacity Resource that has not cleared in a previous Forward Capacity Auction, and On-Peak Demand Resource consisting of measures that have not been in service prior to the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction, or a Seasonal Peak Demand Resource consisting of measures that have not been in service prior to the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction. A Demand Capacity Resource that has previously been defined as an Existing Demand Capacity Resource shall be considered a New Demand Capacity Resource if it meets one of the conditions listed in Section III.13.1.1.1.2.

III.13.1.4.1.1. Qualification Process for New Demand Capacity Resources.

For Forward Capacity Auctions a New Demand Capacity Resource shall have a summer Qualified Capacity and winter Qualified Capacity based on the resource's estimated demand reduction value as

submitted and reviewed pursuant to this Section III.13.1.4. The FCA Qualified Capacity for a New Demand Capacity Resource shall be the lesser of the resource's summer Qualified Capacity and winter Qualified Capacity, as adjusted to account for applicable offers composed of separate resources.

- (a) For a resource to qualify as a New Demand Capacity Resource, the resource's Project Sponsor must make two separate submissions to the ISO: First, the Project Sponsor must submit estimated demand reduction values and supporting information in the New Demand Capacity Resource Show of Interest Form as described in Section III.13.1.4.1.1.1. Second, the Project Sponsor must submit a New Demand Capacity Resource Qualification Package as described in Section III.13.1.4.1.1.2.
- (b) For a resource to qualify as a New Demand Capacity Resource that is an On-Peak Demand Resource or a Seasonal Peak Demand Resource, the Project Sponsor must in addition submit, as part of the New Demand Capacity Resource Qualification Package, a Measurement and Verification Plan providing the documentation, analysis, studies and methodologies used to support the estimates described in this Section III.13.1.4.1.1, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.1.1.1. New Demand Capacity Resource Show of Interest Form.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Capacity Resource, the Project Sponsor must submit to the ISO a New Demand Capacity Resource Show of Interest Form as described in this Section III.13.1.4.1.1.1 during the New Capacity Show of Interest Submission Window, as described in Section III.13.1.10. A New Demand Capacity Resource Show of Interest Form for a resource composed of Energy Efficiency measures must represent a resource with a new and unique resource identification number. The ISO may waive the submission of any information not required for evaluation of a project.

A completed New Demand Capacity Resource Show of Interest Form shall include, but is not limited to, the following information: project name; Load Zone within which the Demand Capacity Resource will be located; the Dispatch Zone within which an Active Demand Capacity Resource will be located; estimated summer and winter demand reduction values (MW) per measure and/or per customer facility (measured at the customer meter and not including losses); estimated total summer and winter demand reduction value of the Demand Capacity Resource (for an Active Demand Capacity Resource, this estimate must be

consistent with the baseline calculation methodology in Section III.8.2); supporting documentation (e.g., engineering estimates or documentation of verified savings from comparable projects) to substantiate the reasonableness of the estimated demand reduction values; Demand Capacity Resource type (Active Demand Capacity Resource, On-Peak Demand Resource, or Seasonal Peak Demand Resource); brief Demand Capacity Resource project description including measure type (i.e., Energy Efficiency, Load Management, and/or Distributed Generation); types of facilities at which the measures will be implemented; customer classes and end-uses served; the date by which the Project Sponsor expects to be ready to demonstrate to the ISO that the Demand Capacity Resource described in the Project Sponsor's New Demand Capacity Resource Qualification Package has achieved its full demand reduction value; ISO Market Participant status and ISO customer identification (if applicable); status under Schedules 22 or 23 of the Transmission, Markets and Services Tariff (if applicable); project/technical and credit/financial contacts; for individual Distributed Generation projects and Demand Capacity Resource projects from a single facility with a demand reduction value equal to or greater than 5 MW, the Pnode and service address at which the end-use facility is located; capability and experience of the Project Sponsor.

III.13.1.4.1.1.2. New Demand Capacity Resource Qualification Package.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Capacity Resource, the Project Sponsor must submit a New Demand Capacity Resource Qualification Package no later than the New Capacity Qualification Deadline. The New Demand Capacity Resource Qualification Package shall conform to the requirements of this Section III.13.1.4.1.1.2. The ISO may waive the submission of any information not required for evaluation of a project.

III.13.1.4.1.1.2.1. Source of Funding.

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

III.13.1.4.1.1.2.2. Measurement and Verification Plan.

For On-Peak Demand Resources and Seasonal Peak Demand Resources, the Project Sponsor must provide in the New Demand Capacity Resource Qualification Package a Measurement and Verification

Plan that complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.1.1.2.3. Customer Acquisition Plan.

- (a) A Project Sponsor with more than a single customer must include in the New Demand Capacity Resource Qualification Package a description of its plan to acquire customers that includes, but is not limited to, the following information: a description of proposed customer market; the estimated size of target market and supporting documentation; a marketing plan with supporting documentation describing the manner in which customers will be recruited; and evidence supporting the viability of the marketing plan.
- (b) A Project Sponsor for a New Demand Capacity Resource that includes one or more end-use customer facilities with behind-the-meter generation must include in the New Demand Capacity Resource Qualification Package information demonstrating that each facility's Net Supply Capability will be less than 5 MW or less than or equal to the facility's Maximum Facility Load.

III.13.1.4.1.1.2.4. Critical Path Schedule for a Demand Capacity Resource with a Demand Reduction Value of at Least 5 MW at a Single Retail Delivery Point.

The Project Sponsor of a Demand Capacity Resource with a demand reduction value of at least 5 MW at a single Retail Delivery Point shall provide in the New Demand Capacity Resource Qualification Package a critical path schedule as set forth in Section III.13.1.1.2.2.2.

III.13.1.4.1.1.2.5. Critical Path Schedule for a Demand Capacity Resource with All Retail Delivery Points Having a Demand Reduction Value of Less Than 5 MW.

The Project Sponsor of a Demand Capacity Resource with all Retail Delivery Points having a demand reduction value of less than 5 MW shall provide in the New Demand Capacity Resource Qualification Package a critical path schedule comprised of a delivery schedule of the share of total offered demand reduction value achieved as of target dates, as follows: (i) the cumulative percentage of total demand reduction value achieved on target date 1 occurring five weeks prior to the first annual Forward Capacity Auction after the Forward Capacity Auction in which the Project Sponsor's capacity award was made; (ii) the cumulative percentage of total demand reduction value achieved on target date 2 occurring five weeks prior to the second annual Forward Capacity Auction after the Forward Capacity Auction in which the Project Sponsor's capacity award was made; and (iii) target date 3 which is the date by which the Project

Sponsor expects to be ready to demonstrate to the ISO that the Demand Capacity Resource described in the Project Sponsor's New Demand Capacity Resource Qualification Package has achieved its full demand reduction value, which must be on or before the first day of the relevant Capacity Commitment Period and by which date 100% of total demand reduction value must be complete.

III.13.1.4.1.1.2.6. [Reserved.]

III.13.1.4.1.1.2.7. Capacity Commitment Period Election.

In the New Demand Capacity Resource Qualification Package, the Project Sponsor must specify whether, if its New Demand Capacity Resource offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to six additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. If no such election is made in the New Demand Capacity Resource Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Demand Capacity Resource offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Demand Capacity Resource offer clears. If the Project Sponsor elects to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, then the Project Sponsor may not change the Demand Capacity Resource type as long as that Capacity Supply Obligation and Capacity Clearing Price continue to apply. If an offer from a New Demand Capacity Resource clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.4.1.1.2.7.

III.13.1.4.1.1.2.8. Offer Information From New Demand Capacity Resources.

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

Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that section.

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

III.13.1.4.1.1.3. Initial Analysis for Active Demand Capacity Resources.

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

III.13.1.4.1.1.4. Consistency of the New Demand Capacity Resource Qualification Package and New Demand Capacity Resource Show of Interest Form.

The ISO shall review the Project Sponsor's New Demand Capacity Resource Qualification Package for consistency with its New Demand Capacity Resource Show of Interest Form. The New Demand Capacity Resource Qualification Package may not contain material changes relative to the New Demand Capacity Resource Show of Interest Form. A material change may include, but is not limited to the following: (i) a change in the designation of the Demand Capacity Resource type; (ii) a change in the Project Sponsor, subject to review by the ISO of the capability and experience of the new Project Sponsor; (iii) a change in the Load Zone within which the project is located, and a change in the Dispatch Zone within which the Active Demand Capacity Resource is located; (iv) a change in the total summer or winter demand reduction value of the project by more than 30 percent; (v) a change in the general type of

measure being implemented (e.g., Energy Efficiency, Load Management, Distributed Generation); or (vi) a misrepresentation of the interconnection status of a Distributed Generation project.

III.13.1.4.1.1.5. Evaluation of New Demand Capacity Resource Qualification Materials.

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

- (a) whether the information submitted by New Demand Capacity Resources is accurate and contains all of the elements required by this Section III.13.1.4;
- (b) whether the critical path schedule submitted by New Demand Capacity Resources includes all necessary elements and is sufficiently developed;
- (c) whether the milestones in the critical path schedule submitted by New Demand Capacity Resources are reasonable and likely to be met;
- (d) whether, in the case of a resource previously counted as a capacity resource, the requirements for treatment as a New Demand Capacity Resource are satisfied; and
- (e) whether, in the case of a New Demand Capacity Resource that is an On-Peak Demand Resource or Seasonal Peak Demand Resource, the Measurement and Verification Plan complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.1.1.6. Qualification Determination Notification for New Demand Capacity Resources.

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

- (a) For a New Demand Capacity Resource accepted for participation in the Forward Capacity Auction, the notification will specify the Demand Capacity Resource type and the Demand Capacity Resource's summer and winter Qualified Capacity, which shall be the ISO-determined summer and winter demand reduction value increased by average avoided peak transmission and distribution losses (that is, eight percent).
- (b) For a New Demand Capacity Resource not accepted for participation in the Forward Capacity Auction, the notification will provide an explanation as to why the resource did not meet the requirements set forth in this Section III.13.1.4 and was not accepted.

III.13.1.4.2. Definition of Existing Demand Capacity Resources.

Demand Capacity Resources that previously have been in service and registered with the ISO, and which are not otherwise New Demand Capacity Resources, shall be Existing Demand Capacity Resources. Existing Demand Capacity Resources shall include and are limited to Demand Capacity Resources that have been in service and registered with the ISO to fulfill a Capacity Supply Obligation created by clearing in a past Forward Capacity Auction before the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction. Except as specified in this Section III.13.1.4, Existing Demand Capacity Resources shall be subject to the same qualification process as Existing Generating Capacity Resources, as described in Section III.13.1.2.3. Existing Demand Capacity Resources shall be subject to Section III.13.1.2.2.5.2. An On-Peak Demand Resource or Seasonal Peak Demand Resource may not include in its summer or winter demand reduction value an Energy Efficiency measure whose Measure Life will expire before the beginning of the applicable season of the associated Capacity Commitment Period.

III.13.1.4.2.A Qualified Capacity for Existing Demand Capacity Resources.

(a) For Existing Demand Capacity Resources composed of Energy Efficiency measures, the summer (or winter, as applicable) Qualified Capacity shall equal the lesser of: (i) the sum of the summer (or winter, as applicable) demand reduction values of the installed Energy Efficiency measures as of the Existing Capacity Qualification Deadline (excluding any capacity that will retire or permanently de-list, or whose Measure Life will expire, prior to start of the applicable season of the relevant Capacity Commitment Period, and increased by average avoided peak transmission and distribution losses) and any summer (or winter, as applicable) capacity that has cleared in a Forward Capacity Auction and has not yet achieved FCM Commercial Operation (provided that such capacity is being monitored by the ISO

pursuant to the provisions of Section III.13.3, is expected to achieve all its critical path schedule milestones prior to the start of the applicable season of the relevant Capacity Commitment Period, and for which the Lead Market Participant or Project Sponsor has met all relevant financial assurance requirements as described in Section III.13.1.9 and in the ISO New England Financial Assurance Policy) and (ii) the amount of summer (or winter, as applicable) capacity that cleared in a Forward Capacity Auction as a New Demand Capacity Resource.

(b) For Existing Demand Capacity Resources other than those composed of Energy Efficiency measures, the summer and winter Qualified Capacity shall equal the summer and winter demand reduction value, respectively, increased by average avoided peak transmission and distribution losses.

III.13.1.4.2.1. Qualified Capacity Notification for Existing Demand Capacity Resources.

- (a) For each Existing Demand Capacity Resource, the ISO will notify the Resource's Lead Market Participant no later than 15 Business Days before the Existing Capacity Retirement Deadline of: the Demand Capacity Resource type; summer and winter Qualified Capacity; the Load Zone in which the Demand Capacity Resource is located; and, for Active Demand Capacity Resources, the Dispatch Zone in which the resource is located.
- (b) If the Lead Market Participant believes that the ISO's assessment of the Qualified Capacity is inaccurate, the Market Participant must notify the ISO within five Business Days of receipt of the Qualified Capacity notification.
- (c) If a Market Participant with an Existing On-Peak Demand Resource or Existing Seasonal Peak Demand Resource wishes to change its Demand Capacity Resource type, the Market Participant must submit an Updated Measurement and Verification Plan to reflect the change in its resource type. Updated Measurement and Verification Plans must be received by the ISO no later than five Business Days after receipt of the Qualified Capacity notification. Designation of the Demand Capacity Resource type may not be changed during the Capacity Commitment Period.
- (d) A Market Participant with an Existing On-Peak Demand Resource or Existing Seasonal Peak Demand Resource may provide an Updated Measurement and Verification Plan as described in Section III.13.1.4.3.1.2 that complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals. Updated Measurement and Verification Plans

must be received by the ISO no later than five Business Days after receipt of the Qualified Capacity notification.

(e) If an Existing Demand Capacity Resource is not submitting a Static De-List Bid, Permanent De-List Bid, or Retirement De-List Bid for the Forward Capacity Auction, then no further submissions or actions for that resource are necessary, and the resource shall participate in the Forward Capacity Auction as described in Section III.13.2.3.2(c) with Qualified Capacity as indicated in the ISO's notification.

III.13.1.4.2.2. Existing Demand Capacity Resource De-List Bids.

An Existing Demand Capacity Resource may submit a Permanent De-List Bid or Retirement De-List Bid pursuant to the provisions of Section III.13.1.2.3.1.5 no later than the Existing Capacity Retirement Deadline or a Static De-List Bid pursuant to the provisions of Section III.13.1.2.3.1.1 no later than the Existing Capacity Qualification Deadline, provided, however, that no de-list bid shall be used as a mechanism to inappropriately qualify Assets associated with Existing Demand Capacity Resources as New Demand Capacity Resources.

III.13.1.4.3. Measurement and Verification Applicable to On-Peak Demand Resources and Seasonal Peak Demand Resources.

To demonstrate the demand reduction value of an On-Peak Demand Resource or Seasonal Peak Demand Resource, the Project Sponsor or Market Participant of such a resource participating in the Forward Capacity Auction, Capacity Supply Obligation Bilaterals, or reconfiguration auctions shall submit to the ISO the Measurement and Verification Documents in accordance with this Section III.13.1.4.3 and the ISO New England Manuals. The ISO shall review such Measurement and Verification Documents to determine whether they are consistent with the measurement and verification requirements set forth in this Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.3.1. Measurement and Verification Documents.

Measurement and Verification Documents must demonstrate both availability and performance of an On-Peak Demand Resource or Seasonal Peak Demand Resource in reducing demand coincident with Demand Resource On-Peak Hours or Demand Resource Seasonal Peak Hours such that the reported monthly demand reduction value shall achieve at least a ten percent relative precision and an eighty percent confidence interval as described and applied in the ISO New England Manuals and ISO New England Operating Procedures. The Measurement and Verification Documents shall serve as the basis for the

claimed demand reduction value of an On-Peak Demand Resource or Seasonal Peak Demand Resource. The Measurement and Verification Documents shall document the measurement and verification performed to verify the achieved demand reduction value of the On-Peak Demand Resource or Seasonal Peak Demand Resource. The Measurement and Verification Documents shall contain a projection of the On-Peak Demand Resource's or Seasonal Peak Demand Resource's demand reduction value for each month of the Capacity Commitment Period and over the expected Measure Lives associated with the Demand Capacity Resources. An On-Peak Demand Resource's or Seasonal Peak Demand Resource's Measurement and Verification Documents must describe the methodology used to calculate electrical energy load reduction or output during Demand Resource On-Peak Hours, or Demand Resource Seasonal Peak Hours. If an On-Peak Demand Resource or Seasonal Peak Demand Resource includes Distributed Generation, the Measurement and Verification Documents must describe the individual metering or metering protocol used to monitor and verify the output of the Distributed Generation, consistent with the measurement and verification requirements set forth in Market Rule 1 and the ISO New England Manuals.

The Measurement and Verification Documents shall include a Measurement and Verification Plan submitted in the Forward Capacity Auction Qualification, as described in Section III.13.1.4.3 and a monthly Measurement and Verification Summary Report during the Capacity Commitment Period. The monthly Measurement and Verification Summary Reports shall reference the measurement and verification protocols and performance data documented in the Measurement and Verification Plan or the Measurement and Verification Reference Report(s). Such monthly Measurement and Verification Summary Reports will document the Project Sponsor's total demand reduction value from eligible preexisting measures and new measures, and the Project Sponsor's total demand reduction value from both eligible pre-existing measures and new measures, for all measures it had in operation as of the end of the previous month. The monthly Measurement and Verification Summary Reports shall be based on Measurement and Verification Documents determined in accordance with Market Rule 1 and the ISO New England Manuals, and shall be the basis for monthly settlement with Project Sponsors. All Measurement and Verification Documents shall conform to the ISO's specifications with respect to content, format and delivery methodology, and shall be submitted in accordance with the timelines and deadlines set forth in Market Rule 1 and the ISO New England Manuals.

III.13.1.4.3.1.1. Optional Measurement and Verification Reference Reports.

At the option of the Project Sponsor, the Measurement and Verification Documents for an On-Peak Demand Resource or a Seasonal Peak Demand Resource may also include one or more Measurement and Verification Reference Report(s) submitted during the Capacity Commitment Period subject to the schedule in the Measurement and Verification Plan and consistent with the schedule and reporting standards set forth in the ISO New England Manuals. Measurement and Verification Reference Reports shall update the prospective demand reduction value of the On-Peak Demand Resource or Seasonal Peak Demand Resource based on measurement and verification studies performed during the Capacity Commitment Period.

III.13.1.4.3.1.2. Updated Measurement and Verification Documents.

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

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

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

III.13.1.4.3.1.4. Record Requirement of Retail Customers Served.

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

III.13.1.4.3.2. ISO Review of Measurement and Verification Documents.

The ISO shall review the Measurement and Verification Documents and complete such review and identify any necessary modifications in accordance with the Forward Capacity Auction qualification process as described in Section III.13.1 and pursuant to the ISO New England Manuals. In its review of the Measurement and Verification Documents, the ISO may consult with the Project Sponsor or Lead Market Participant to seek clarification, to gather additional necessary information, or to address questions or concerns arising from the materials submitted. At the discretion of the ISO, the ISO may consider revisions or additions to the Measurement and Verification Documents resulting from such consultation; provided, however, that in no case shall the ISO consider revisions or additions to the Measurement and Verification Documents if the ISO believes that such consideration cannot be properly accomplished within the time periods established for the qualification process.

III.13.1.5. Offers Composed of Separate Resources.

Separate resources seeking to participate together in a Forward Capacity Auction shall submit a composite offer form no later than 10 Business Days after the date on which the ISO provides qualification determination notifications, as described in Section III.13.1.1.2.8, Section III.13.1.2.4, and Section III.13.1.4.1.1.6. Offers composed of separate resources may not be modified or withdrawn after the deadline for submission of the composite offer form. Separate resources may together participate in a Forward Capacity Auction as a single resource if the following conditions are met:

- (a) In all months of the summer period (June through September where the summer resource is not a Demand Capacity Resource, April through November where the summer resource is a Demand Capacity Resource) of the Capacity Commitment Period, only one resource may be used to supply the amount of capacity offered during the entire summer period. In all months of the winter period (October through May where the summer resource is not a Demand Capacity Resource, December through March where the summer resource is a Demand Capacity Resource) of the Capacity Commitment Period, multiple resources may be combined to supply the amount of capacity offered, provided that: (i) the resources together meet the amount of the offer in all months of the winter period; and (ii) to combine for a month, that month must be considered a winter month for both the summer resource and the resource combining with that summer resource in that month.
- (b) Each resource that is part of an offer composed of separate resources must qualify in accordance with all of the provisions of this Section III.13.1.5 applicable to that resource type. An offer composed of separate resources participates in the Forward Capacity Auction in accordance with the resource type of the resource providing capacity in the summer period. A resource electing (pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.1.1.2.7) to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its New Capacity Offer clears shall not be eligible to participate in an offer composed of separate resources as the resource providing capacity in the summer period in the Forward Capacity Auction in which the resource is a New Generating Capacity Resource or New Demand Capacity Resource.
- (c) The summer Qualified Capacity of an offer composed of separate resources shall be the summer Qualified Capacity of the single resource that will provide the Capacity Supply Obligation during the summer period. If the summer Qualified Capacity of an offer composed of separate resources is greater than the winter capacity for any month, then the provisions of Section III.13.1.2.2.5.2 shall apply, even where any of the resources comprising the offer composed of separate resources is an Intermittent Power Resource. If the winter capacity of the offer composed of separate resources in any month is higher than the summer Qualified Capacity, then the capacity offered from the winter resources will be reduced prorata to equal the summer Qualified Capacity.
- (d) Offers composed of separate resources are subject to the locational restrictions specified in the following table:

		Location of Summer Resource			
		Import- Constrained Capacity Zone	Rest-of-Pool Capacity Zone	Export- Constrained Capacity Zone	Nested Export- Constrained Capacity Zone
Location of Winter Resource	Import- Constrained Capacity Zone	Eligible (within same Capacity Zone)	Eligible	Eligible	Eligible
	Rest-of-Pool Capacity Zone	Ineligible	Eligible	Eligible	Eligible
	Export- Constrained Capacity Zone	Ineligible	Ineligible	Eligible (within same Capacity Zone)	Eligible (within same Capacity Zone where nested export-constrained Capacity Zone is located)
	Nested Export- Constrained Capacity Zone	Ineligible	Ineligible	Ineligible	Eligible (within same Capacity Zone)

(e) A Renewable Technology Resource may only participate in an offer composed of separate resources if its FCA Qualified Capacity has not been prorated pursuant to Section III.13.1.1.2.10.

III.13.1.5.A. Notification of FCA Qualified Capacity.

No later than five Business Days after the deadline for submission of offers composed of separate resources, the ISO shall notify the Project Sponsor or Lead Market Participant for each New Generating Capacity Resource, New Import Capacity Resource, and New Demand Capacity Resource of the resource's final FCA Qualified Capacity for the Forward Capacity Auction. Such notification will detail the resource's financial assurance requirements in accordance with Section III.13.1.9.

III.13.1.6. Self-Supplied FCA Resources.

Where a Project Sponsor elects to designate all or a portion of a New Generating Capacity Resource or an Existing Generating Capacity Resource as a Self-Supplied FCA Resource, the Project Sponsor must make such designation in writing to the ISO no later than the date by which the Project Sponsor is required to submit the FCM Deposit and, if the Project Sponsor is not also the associated load serving

entity, the Project Sponsor must at that time provide written confirmation from the load serving entity regarding the Self-Supplied FCA Resource designation. A New Import Capacity Resource or Existing Import Capacity Resource may be designated as a Self-Supplied FCA Resource. All Self-Supplied FCA Resources shall be subject to the eligibility and locational requirements in this Section III.13.1.6. If designated as a Self-Supplied FCA Resource and otherwise accepted in the qualification process, the resource will clear in the Forward Capacity Auction as described in Section III.13.2.3.2(c) and, with the exception of demand programs for Self-Supplied FCA Resources, shall offset an equal amount of the load serving entity's Capacity Load Obligation in the Capacity Commitment Period. A load serving entity seeking to self-supply using a Demand Capacity Resource shall realize the benefit through the actual reduction in its annual system coincident peak load, shall not receive credit for a resource and, therefore, is not required to participate in the qualification process described in this Section III.13.1. All designations as a Self-Supplied FCA Resource in the Forward Capacity Auction qualification process are binding.

III.13.1.6.1. Self-Supplied FCA Resource Eligibility.

Where all or a portion of a resource is designated as a Self-Supplied FCA Resource, it shall also maintain its status as a New Generating Capacity Resource, Existing Generating Capacity Resource, New Import Capacity Resource or Existing Import Capacity Resource, and must satisfy the Forward Capacity Auction qualification process requirements set forth in the remainder of Section III.13.1 applicable to that resource type, in addition to the requirements of this Section III.13.1.6. Where an offer composed of separate resources is designated as a Self-Supplied FCA Resource, all of the requirements and deadlines specified in Section III.13.1.5 shall apply to that offer, in addition to the requirements of this Section III.13.1.6. The total quantity of capacity that an load serving entity designates as Self-Supplied FCA Resources may not exceed the load serving entity's projected share of the Installed Capacity Requirement during the Capacity Commitment Period which shall be calculated by determining the load serving entity's most recent percentage share of the Installed Capacity Requirement multiplied by the projected Installed Capacity Requirement for the commitment year. No resource may be designated as a Self-Supplied FCA Resource for more MW than the lesser of that resource's summer Qualified Capacity and winter Qualified Capacity.

III.13.1.6.2. Locational Requirements for Self-Supplied FCA Resources.

In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource for a load in an import-constrained Capacity Zone, the Self-Supplied FCA Resource must be located in the same Capacity

Zone as the associated load, unless the Self-Supplied FCA Resource is a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights. In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource in an export-constrained Capacity Zone for a load outside that export-constrained Capacity Zone, the Self-Supplied FCA Resource must be a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights.

III.13.1.7. Internal Market Monitor Review of Offers and Bids.

In addition to the other provisions of this Section III.13.1, the Internal Market Monitor shall have the authority to review in the qualification process each resource's summer and winter Seasonal Claimed Capability if it is significantly lower than historical values, and if the Internal Market Monitor determines that it may be an attempt to exercise physical withholding, the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)). Where an entity submits: (i) an offer as a New Generating Capacity Resource, a New Import Capacity Resource or a New Demand Capacity Resource; and (ii) a Static De-List Bid, a Permanent De-List Bid, a Retirement De-List Bid, an Export Bid or an Administrative Export De-List Bid in the same Forward Capacity Auction, the Internal Market Monitor shall take appropriate steps to ensure that the resource bid to de-list, retire or export in the Forward Capacity Auction is not inappropriately replaced by that new capacity in a subsequent reconfiguration auction or Capacity Supply Obligation Bilateral. In its review of any offer or bid pursuant to this Section III.13.1.7, the Internal Market Monitor may consult with the Project Sponsor or Market Participant, as appropriate, to seek clarification, or to address questions or concerns regarding the materials submitted.

III.13.1.8. Publication of Offer and Bid Information.

- (a) Resource name, quantity and Load Zone (or interface, as applicable) in which the resource is located about each Permanent De-list Bid and Retirement De-List Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (b) The quantity and Load Zone (or interface, as applicable) in which the resource is located of each Static De-List Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (c) Name of submitter, quantity, and interface of Export Bids and Administrative Export Bids shall be published no later than 15 days after the Forward Capacity Auction is conducted.

- (d) Name of submitter, quantity, and interface about offers from New Import Capacity Resources shall be published no later than 15 days after the Forward Capacity Auction is conducted.
- (e) No later than three Business Days after the Existing Capacity Retirement Deadline, the ISO shall post on its website information concerning Permanent De-List Bids and Retirement De-List Bids.
- Administrative Export De-List Bids, as well as the number and type of such de-list bids submitted by each Lead Market Participant, shall be published no later than three Business Days after the ISO issues the qualification determination notifications described in Sections III.13.1.1.2.8, III.13.1.2.4(b), and III.13.1.3.5.7. Authorized Persons of Authorized Commissions will be provided confidential access to full information about posted Static De-list Bids, Permanent De-List Bids, and Retirement De-List Bids upon request pursuant to Section 3.3 of the ISO New England Information Policy.
- (g) No later than five Business Days after the close of the New Capacity Show of Interest Submission Window, the ISO shall post on its website the aggregate quantity of supply offers and demand bids that have been elected to participate in the substitution auction by Capacity Zone (where the zones used are those being studied for inclusion in the associated Forward Capacity Auction pursuant to Section III.12.4).

III.13.1.9. Financial Assurance.

Except as noted in this Section III.13.1.9, all financial assurance requirements associated with Forward Capacity Auctions and annual reconfiguration auctions and other payments and charges resulting from the Forward Capacity Market shall be governed by the ISO New England Financial Assurance Policy.

III.13.1.9.1. Financial Assurance for New Generating Capacity Resources and New Demand Capacity Resources Participating in the Forward Capacity Auction.

In order to participate in any Forward Capacity Auction, New Generating Capacity Resources (including Conditional Qualified New Resources) and New Demand Capacity Resources shall be required to meet the financial assurance requirements as described in the ISO New England Financial Assurance Policy. Timely payment of the FCM Deposit by the Project Sponsor for a New Generating Capacity Resource or New Demand Capacity Resource accepted for participation in the Forward Capacity Auction constitutes a

commitment to offer the full FCA Qualified Capacity of that New Generating Capacity Resource or New Demand Capacity Resource in the Forward Capacity Auction at the Forward Capacity Auction Starting Price. If the FCM Deposit is not received within the timeframe specified in the ISO New England Financial Assurance Policy, the New Generating Capacity Resource or New Demand Capacity Resource shall not be permitted to participate in the Forward Capacity Auction. If capacity offered by the New Generating Capacity Resource or New Demand Capacity Resource clears in the Forward Capacity Auction, financial assurance required prior to the auction pursuant to FAP shall be applied toward the resource's financial assurance obligation, as described in the ISO New England Financial Assurance Policy. If no capacity offered by that New Generating Capacity Resource or New Demand Capacity Resource clears in the Forward Capacity Auction, the financial assurance required prior to the auction pursuant to FAP will be released pursuant to the terms of the ISO New England Financial Assurance Policy.

III.13.1.9.2. Financial Assurance for New Generating Capacity Resources and New Demand Capacity Resources Clearing in a Forward Capacity Auction.

Where a New Generating Capacity Resource's offer or a New Demand Capacity Resource's offer is accepted in a Forward Capacity Auction, that resource must provide financial assurance as described in the ISO New England Financial Assurance Policy.

III.13.1.9.2.1. Failure to Provide Financial Assurance or to Meet Milestone.

If a New Generating Capacity Resource or New Demand Capacity Resource: (i) fails to provide the required financial assurance as described in the ISO New England Financial Assurance Policy or (ii) has its Capacity Supply Obligation terminated by the ISO pursuant to Section III.13.3.4A, it shall lose its Capacity Supply Obligation and its right to any payments associated with that Capacity Supply Obligation, and it shall forfeit any financial assurance provided with respect to that Capacity Supply Obligation.

III.13.1.9.2.2. Release of Financial Assurance.

Once a New Generating Capacity Resource or New Demand Capacity Resource achieves FCM Commercial Operation, its financial assurance obligation shall be released pursuant to the terms of the ISO New England Financial Assurance Policy and it shall have the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy. If a New Generating Capacity Resource or New Demand Capacity Resource is only capable of

delivering less than the amount of capacity that cleared in the Forward Capacity Auction, then the portion of its financial assurance associated with the shortfall shall be forfeited.

III.13.1.9.2.2.1. [Reserved.]

III.13.1.9.2.3. Forfeit of Financial Assurance.

Where any financial assurance is forfeited pursuant to the provisions of Section III.13, there shall be no further coverage for such forfeit under the ISO New England Billing Policy. Any financial assurance that is forfeited pursuant to Section III.13 shall be used to reduce charges incurred by load in the relevant Capacity Zone.

III.13.1.9.2.4. Financial Assurance for New Import Capacity Resources.

A New Import Capacity Resource that is backed by a new External Resource or will be delivered over an Elective Transmission Upgrade with a Capacity Network Import Interconnection Service Interconnection Request pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff shall be subject to the same financial assurance requirements as a New Generating Capacity Resource, as described in Section III.13.1.9.1 and Section III.13.1.9.2. Once the new External Resource or the Elective Transmission Upgrade achieves FCM Commercial Operation, the New Import Capacity Resource shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as described in Section III.13.1.9. A New Import Capacity Resource that is backed by one or more existing External Resources or by an external Control Area shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy.

III.13.1.9.3. Qualification Process Cost Reimbursement Deposit.

For each New Capacity Show of Interest Form and New Demand Capacity Resource Show of Interest Form submitted for the purposes of qualifying for either a Forward Capacity Auction or reconfiguration auction, the Project Sponsor must submit to the ISO a refundable deposit in the amount shown in the table below ("Qualification Process Cost Reimbursement Deposit"). The Qualification Process Cost Reimbursement Deposit must be received in accordance with the ISO New England Billing Policy. Such deposit shall be used for costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3.

An additional Qualification Process Cost Reimbursement Deposit is not required if: (i) the Project Sponsor is actively seeking qualification for another Forward Capacity Auction or annual reconfiguration auction, or is having the project's critical path schedule monitored pursuant to Section III.13.3; and (ii) the costs already incurred in the qualification process and critical path schedule monitoring do not equal or exceed 90 percent of the amount of the previously-submitted Qualification Process Cost Reimbursement Deposit(s). The ISO shall provide the Project Sponsor with an annual statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. In any case where resources are aggregated or disaggregated, the associated Qualification Process Cost Reimbursement Deposits will be adjusted as appropriate. After aggregation or disaggregation of resources, historical data regarding the costs already incurred in the qualification process of the original resources will no longer be provided. Coincident with the issuance of the annual statement, where incurred costs are equal to or greater than 90 percent of the Qualification Process Cost Reimbursement Deposit(s) previously submitted, the ISO will issue an invoice in the amount determined pursuant to the Qualification Process Cost Reimbursement Deposit table contained in Section III.13.1.9.3.1 plus any excess of costs incurred to date by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3. Any refunds that may result from aggregation of resources will be issued coincident with the annual statement. Payment on the invoice must be received in accordance with the ISO New England Billing Policy. If the Project Sponsor fails to pay the amount due by the stated due date, the ISO will consider the resources that were invoiced withdrawn by the Project Sponsor. Such a withdrawal shall be irrevocable, and payment on the invoice after the due date will not remedy the failure to pay or the withdrawal.

III.13.1.9.3.1. Partial Waiver Of Deposit.

A portion of the deposit shall be waived when there is an active Interconnection Request and an executed Interconnection Feasibility Study Agreement or Interconnection System Impact Study Agreement under Schedule 22, 23 or 25 of Section II of the Transmission, Markets and Services Tariff or where a resource modification does not require a revision to the Interconnection Agreement.

New Generating Capacity Resources ≥	New Generating Capacity Resources <	Imports and New Demand Capacity	New Generating Capacity Resources
20 MW or an Import	20 MW and ≥ 2 MW	Resources	< 2 MW
Capacity Resource			

associated with an Elective Transmission Upgrade that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff Including Up-rates, Re-powering, Environmental Compliance &			
Intermittent Power Resources	Intermittent Power Resources		
\$25,000	\$7,500	\$1,000	\$500
With Executed Interconnection Feasibility Study Agreement or System Impact Study Agreement	With Executed Interconnection Feasibility Study Agreement or System Impact Study Agreement		
\$15,000	\$6,500	n/a	n/a

III.13.1.9.3.2. Settlement of Costs.

III.13.1.9.3.2.1. Settlement Of Costs Associated With Resources Participating In A Forward Capacity Auction Or Reconfiguration Auction.

Upon the latter of: (i) the first day of the Capacity Commitment Period for which a resource offers into the Forward Capacity Market or (ii) the date on which the entire resource is accepted by the ISO for FCM Commercial Operation, the ISO shall provide the Project Sponsor with a statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. If any portion of the Qualification Process Cost Reimbursement Deposit exceeds the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the

affected Transmission Owner(s) associated with the qualification process and critical path schedule monitoring, the ISO shall refund to the Project Sponsor the excess including interest calculated in accordance with 18 CFR § 35.19a(a)(2). If the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring exceed the Qualification Process Cost Reimbursement Deposit, the Project Sponsor shall pay such excess, including interest calculated in accordance with 18 CFR § 35.19a(a)(2) – For Demand Capacity Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

III.13.1.9.3.2.2. Settlement Of Costs Associated With Resources That Withdraw From A Forward Capacity Auction Or Reconfiguration Auction.

Upon the withdrawal or failure to meet the requirements of the qualification process set forth in Section III.13.1, the ISO shall provide the Project Sponsor with a statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. A Project Sponsor that withdraws or is deemed to have withdrawn its request for qualification shall pay to the ISO all costs prudently incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. The ISO shall refund to the Project Sponsor any portion of the Qualification Process Cost Reimbursement Deposit that exceeds the costs associated with the qualification process and critical path schedule monitoring incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), including interest calculated in accordance with 18 CFR § 35.19a(a)(2). The ISO shall charge the Project Sponsor the amount of such costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), that exceeds the Qualification Process Cost Reimbursement Deposit, including interest calculated in accordance with 18 CFR § 35.19a(a)(2). For Demand Capacity Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

III.13.1.9.3.2.3. Crediting Of Reimbursements.

Cost reimbursements received (excluding amounts passed through to the ISO's consultants and to affected Transmission Owner(s)) by the ISO pursuant to this Section III.13.1.9.3.2 shall be credited against revenues received by the ISO pursuant to Section IV.A.6.1 of the Transmission, Markets and Services Tariff.

III.13.1.10. Forward Capacity Auction Qualification Schedule.

Beginning with the timeline for the Capacity Commitment Period beginning on June 1, 2017 (the eighth Forward Capacity Auction), and for each Capacity Commitment Period thereafter, the deadlines will be consistent for each Capacity Commitment Period, as follows:

- (a) each Capacity Commitment Period shall begin in June;
- (b) the Existing Capacity Retirement Deadline will be in March, approximately four years and three months before the beginning of the Capacity Commitment Period;
- (c) the New Capacity Show of Interest Submission Window will be in April, approximately four years and two months before the beginning of the Capacity Commitment Period;
- (d) the Existing Capacity Qualification Deadline will be 90 days after the Existing Capacity Retirement Deadline, approximately four years before the beginning of the Capacity Commitment Period;
- (e) the New Capacity Qualification Deadline will be in June or July that is just under four years before the beginning of the Capacity Commitment Period; and
- (f) the Forward Capacity Auction for the Capacity Commitment Period will begin in February approximately three years and four months before the beginning of the Capacity Commitment Period.

III.13.1.11 Opt-Out for Resources Electing Multiple-Year Treatment.

Beginning in the qualification process for the ninth Forward Capacity Auction (for the Capacity Commitment Period beginning June 1, 2018), any resource that had elected in a Forward Capacity Auction prior to the ninth Forward Capacity Auction (pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.1.1.2.7) to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its New Capacity Offer cleared may, by submitting a written notification to the ISO no later than the Existing Capacity Qualification Deadline (or, in the case of the ninth Forward Capacity Auction, no later than September 19, 2014), opt-out of the remaining years of the resource's multiple-year election. A decision

to so opt-out shall be irrevocable. A resource choosing to so opt-out will participate in subsequent Forward Capacity Auctions in the same manner as other Existing Capacity Resources.

III.13.1. Forward Capacity Auction Qualification.

Each resource, or portion thereof, must qualify as a New Generating Capacity Resource (Section III.13.1.1), an Existing Generating Capacity Resource (Section III.13.1.2), a New Import Capacity Resource or Existing Import Capacity Resource (Section III.13.1.3), or a New Demand Capacity Resource or Existing Demand Capacity Resource (Section III.13.1.4). Each resource must be at least 100 kW in size to participate in the Forward Capacity Auction, except for resources registered with the ISO prior to the earliest date that any portion of this Section III.13 becomes effective. An offer may be composed of separate resources, pursuant to the provisions of Section III.13.1.5. Pursuant to the provisions of this Section III.13.1, the ISO shall determine a summer Qualified Capacity and a winter Qualified Capacity for each resource, and an FCA Qualified Capacity for each Existing Generating Capacity Resource, Existing Import Capacity Resource, Existing Demand Capacity Resource, New Generating Capacity Resource, New Import Capacity Resource, and New Demand Capacity Resource.

All Project Sponsors must be Market Participants no later than 30 days prior to the deadline for submitting the FCM Deposit. The Lead Market Participant for a resource participating in a Forward Capacity Auction may not change in the 15 Business Days prior to, or during, that Forward Capacity Auction.

III.13.1.1. New Generating Capacity Resources.

To participate in a Forward Capacity Auction as a New Generating Capacity Resource, a resource or proposed resource must meet the requirements of this Section III.13.1.1.

III.13.1.1.1. Definition of New Generating Capacity Resource.

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

III.13.1.1.1.1. Resources Never Previously Counted as Capacity.

(a) A resource, or a portion thereof, will be considered to have never been counted as a capacity resource if it has not cleared in any previous Forward Capacity Auction.

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

III.13.1.1.1.2. Resources Previously Counted as Capacity.

A resource that has previously been counted as a capacity resource, including a deactivated or retired capacity resource, may elect to participate in the Forward Capacity Auction as a New Generating Capacity Resource, as described in this Section III.13.1.1.1.2. The incremental expenditure required to reactivate a resource that previously has been deactivated or retired pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) may be included in the calculation of the dollar per kilowatt thresholds in this Section III.13.1.1.1.2. A resource accepted for participation in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to this Section III.13.1.1.1.2 shall participate in the Forward Capacity Auction pursuant to Section III.13.2.3.2(e). A Market Participant that elects to have a resource that has previously been counted as a capacity resource participate in the Forward Capacity Auction as a New Generating Capacity Resource, must notify the ISO when the existing resource ceases to operate and the New Generating Capacity Resource commences operation. If a Market Participant with a resource that has previously been counted as a capacity resource elects, pursuant to Section III.13.3.4(a)(iii), to have the resource that has previously been counted as a capacity resource cover the Capacity Supply Obligation of a New Generating Capacity Resource and the resource that has previously been counted as a capacity resource must take an outage in order for the New Generating Capacity Resource to commence Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff), then the Market Participant must notify the ISO that the outage is for the purpose of the New Generating Capacity

Resource commencing Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff). A resource shall be accepted for participation as a new resource if it complies with one of the following three subsections:

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

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

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

- (a) will result, by the start of the Capacity Commitment Period, in an increase in output less than or equal to the greater of: (i) 20 percent of the summer Qualified Capacity of the resource at the time of the qualification process for the Forward Capacity Auction; or (ii) 40 MW; and
- (b) will be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the Handy-Whitman Index of Public Utility Construction Costs reflecting data for the period ending January 1 of the year preceding the start of the qualification process for the relevant Forward Capacity Auction. These investment costs may include the costs associated with reactivating a resource that was previously deactivated pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and in which investment in the resource was undertaken prior to reactivation.
- (c) A Project Sponsor or Lead Market Participant making an election pursuant to this Section III.13.1.1.1.3 must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2 for the incremental amount.

III.13.1.1.3.A. Treatment of New Incremental Capacity and Existing Generating Capacity at the Same Generating Resource.

For incremental summer capacity seeking to participate in the Forward Capacity Auction pursuant to Section III.13.1.1.1.3 or incremental winter capacity that meets the investment thresholds in Section III.13.1.1.1.3 as applied to the resource's winter Qualified Capacity, if the incremental summer or winter capacity does not span the entire Capacity Commitment Period, then the ISO shall match the incremental summer or winter capacity with excess existing winter or summer Qualified Capacity at that same resource, as appropriate, not to exceed the Qualified Capacity of the existing portion of the resource, in order to cover the entire Capacity Commitment Period. This provision shall not apply to Intermittent Power Resources.

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

For purposes of the Forward Capacity Market, de-rated capacity of a resource shall be measured by the difference between the summer Qualified Capacity prior to the de-rating of the resource and the most recent summer demonstration of Seasonal Claimed Capability of a resource, as of the fifth Business Day of October. The owner of a resource previously counted as a capacity resource that has been de-rated by at least 2 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) but by no more than the lesser of 20 percent of its summer Qualified Capacity (as an Existing Generating Capacity Resource) or 40 MW for three or more years at the time of the Forward Capacity Auction may elect to have the incremental amount of capacity above the capacity level established while de-rated treated as a New Generating Capacity Resource if it demonstrates that it will be reestablished prior to the start of the Capacity Commitment Period and that the investment in the resource for such purposes shall be equal to or greater than \$200 per kilowatt of the amount of the increase in summer Qualified Capacity resulting from the investment. The Project Sponsor must submit a New Capacity Show of Interest Form pursuant to Section III.13.1.1.2.1 and a New Capacity Qualification Package pursuant to Section III.13.1.1.2.2 for the incremental amount of capacity for the relevant Forward Capacity Auction. The \$200 threshold (in base year 2008 dollars) shall be adjusted annually in accordance with the Handy-Whitman Index of Public Utility Construction Costs reflecting data for the period ending January 1 of the year preceding the start of the qualification process for the relevant Forward Capacity Auction. The owner of a resource seeking to have the incremental amount of capacity counted as a New Generating Capacity Resource as provided in this Section, must demonstrate based on historical data that the resource previously operated at a level at least 2 percent above the de-rated amount.

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

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

III.13.1.1.1.6. Treatment of Deactivated and Retired Units.

(a) [Reserved.]

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

III.13.1.1.1.7 Renewable Technology Resources.

To participate in the Forward Capacity Market as a Renewable Technology Resource, a Generating Capacity Resource or an On-Peak Demand Resource (including every Asset that is part of the On-Peak Demand Resource) must satisfy the following requirements:

- (a) receive an out-of-market revenue source supported by a state- or federally-regulated rate, charge or other regulated cost recovery mechanism;
- (b) qualify as a renewable or alternative energy generating resource under any New England state's mandated (either by statute or regulation) renewable or alternative energy portfolio standards as in effect on January 1, 2014, or, in states without a standard, qualify under that state's renewable energy goals as a renewable resource (either by statute or regulation) as in effect on January 1, 2014. The resource must qualify as a renewable or alternative energy generating resource in the New England state in which it is geographically located. A resource physically located in United States federal waters directly adjacent to New England state maritime boundaries and directly interconnecting to the New England system is considered to be geographically located in the state where its Point of Interconnection is located;

- (c) participate in a Forward Capacity Auction for a Capacity Commitment Period beginning on or after June 1, 2018 as a New Generating Capacity Resource or New Demand Capacity Resource pursuant to Section III.13.1.1, and;
- (d) has been designated for treatment as a Renewable Technology Resource pursuant to Section III.13.1.1.2.9.

An Export Bid or Administrative Export De-List Bid may not be submitted for Generating Capacity Resources that assumed a Capacity Supply Obligation by participating in a Forward Capacity Auction as a Renewable Technology Resource.

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

For a resource to qualify as a New Generating Capacity Resource, the resource's Project Sponsor must make two separate submissions to the ISO: First, the Project Sponsor must submit a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Second, the Project Sponsor must submit a New Capacity Qualification Package no later than the New Capacity Qualification Deadline. Each of these submissions is described in more detail in this Section III.13.1.1.2. The Project Sponsor must also have, or in the case of an Import Capacity Resource seeking to qualify with an Elective Transmission Upgrade be associated with, a valid Interconnection Request under Schedules 22, 23 or 25 of Section II of the Transmission, Markets and Services Tariff prior to submitting a New Capacity Show of Interest Form during the New Capacity Show of Interest Submission Window. Both the New Capacity Show of Interest Form and the New Capacity Qualification Package are required regardless of the status of the project under the interconnection procedures described in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff. Neither the New Capacity Show of Interest Form nor the New Capacity Qualification Package constitutes an Interconnection Request. A Project Sponsor may withdraw from the qualification process at any time prior to three Business Days before the submission of the FCM Deposit pursuant to Section III.13.1.9.1 by providing written notification of such withdrawal to the ISO. Any withdrawal, whether pursuant to this provision or as determined by the ISO (for example as described in Section III.13.1.1.2.1 or Section III.13.1.9.3), shall be irrevocable. The Project Sponsor of a withdrawn application is subject to reconciliation of its Qualification Process Cost Reimbursement Deposit described in Section III.13.1.9.3. None of the provisions of this Section III.13.1, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, supersedes, replaces, or satisfies any of the requirements of Schedules 22, 23 and 25 of Section II of the

Transmission, Markets and Services Tariff, except as specifically provided thereunder. Determinations by the ISO pursuant to this Section III.13.1.1.2, including the initial interconnection analysis and the analysis of overlapping interconnection impacts, are for purposes of qualification for participation in the Forward Capacity Auction only, and do not constitute a right or approval to interconnect, and do not guarantee the ability to interconnect.

III.13.1.1.2.1. New Capacity Show of Interest Form.

Except as otherwise provided in this Section III.13.1.1.2.1, for each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource, the Project Sponsor must submit to the ISO a New Capacity Show of Interest Form as described in this Section III.13.1.1.2.1 during the New Capacity Show of Interest Submission Window. After submission of a New Capacity Show of Interest Form, Material Modification (as defined in Section 4.4 of Schedule 22, Section 1.5 of Schedule 23, or Section 4.4 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff) may not be made to the information contained therein or the New Capacity Show of Interest Form shall be considered withdrawn. No change that may result in a reduction in capacity may be made to a project described in a New Capacity Show of Interest Form or New Capacity Qualification Package between the date that is 150 days before the start of the Forward Capacity Auction and the deadline for qualification determination notifications described in Section III.13.1.1.2.8.

(a) A completed New Capacity Show of Interest Form shall include the following information, to the extent the information is not already provided under an active Interconnection Request under Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff, and other such information necessary to evaluate a project: the project name; the Project Sponsor's contact information; the Project Sponsor's ISO customer status; the date by which the project is expected to achieve Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff); the project address or location, and if relevant, asset identification number; the status of the project under the interconnection procedures described in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff; whether the resource has ever previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010; the capacity (in MW) of the New Generating Capacity Resource; a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21 or some other type); a simple location plan and a one-line diagram of the plant and station facilities, including any known transmission facilities; the location of the

proposed interconnection; and other specific project data as set forth in the New Capacity Show of Interest Form. The ISO may waive the submission of any information not required for evaluation of a project. A completed New Capacity Show of Interest Form shall also specify the Queue Position associated with the project pursuant to Section 4.1 of Schedule 22, Section 1.5 of Schedule 23 or Section 4.1 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff. In the case of a resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Generating Capacity Resource that is supported by an Internal Elective Transmission Upgrade, all Queue Positions associated with the project must be submitted in the New Capacity Show of Interest Form. Submittal of the Interconnection Request may take place prior to the qualification process described here, but no later than the date on which the New Capacity Show of Interest Form is submitted to the ISO; however, the Interconnection Customer Interconnection Request must still be active and consistent with the project described in the New Capacity Show of Interest Form as well as the New Capacity Qualification Package to be submitted as described in Section III.13.1.1.2.2.

- (b) The Project Sponsor must submit with the New Capacity Show of Interest Form, documentation demonstrating that the Project Sponsor has already achieved control of the project site for the duration of the relevant Capacity Commitment Period pursuant to Section III.13.1.1.2.2.1.
- (c) In the New Capacity Show of Interest Form, the Project Sponsor must indicate if the New Generating Capacity Resource is incremental capacity associated with a resource that previously had a Capacity Supply Obligation or previously received payment as a capacity resource pursuant to the market rules in effect prior to June 1, 2010 as discussed in Section III.13.1.1.1.3, or if the New Generating Capacity Resource is incremental capacity associated with a resource previously listed as a capacity resource that has been de-rated for three or more years at the time of the Forward Capacity Auction, as discussed in Section III.13.1.1.1.4.
- (d) [Reserved.]
- (e) With the New Capacity Show of Interest Form, the Project Sponsor must submit the Qualification Process Cost Reimbursement Deposit, as described in Section III.13.1.9.3.

III.13.1.1.2.2. New Capacity Qualification Package.

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

III.13.1.1.2.2.1. Site Control.

For all Forward Capacity Auctions and reconfiguration auctions, the Project Sponsor must achieve, prior to the close of the New Capacity Show of Interest Submission Window, control of the project site for the duration of the relevant Capacity Commitment Period, which shall be as defined in Section 4.1 of Schedule 22, Section 1.5 of Schedule 23 or Section 4.1 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff.

III.13.1.1.2.2.2. Critical Path Schedule.

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

(a) **Major Permits**. In the New Capacity Qualification Package, the Project Sponsor must list all major permits required for the project, and for each major permit, the Project Sponsor must list the agency requiring the permit, the date on which application for the permit is expected to be made, and the expected date of approval. Major permits shall include, but are not limited to: (i) all federal and state permits; and (ii) local, regional, and town permits. The permitting and installation process associated with any major ancillary infrastructure (such as new gas pipelines, new water supply systems, or large storage tanks) should be included in this portion of the New Capacity Qualification Package.

- (b) **Project Financing Closing**. In the New Capacity Qualification Package, the Project Sponsor shall provide (i) the estimated dollar amount of required project financing; (ii) the expected sources of that financing; and (iii) the expected closing date(s) for the project financing.
- (c) Major Equipment Orders. In the New Capacity Qualification Package, the Project Sponsor must provide a list of all of the major components necessary for the project, and the date or dates on which all major components necessary for the project have been or are expected to be ordered. Although the specific technology will determine the list of major components to be included, the list shall include, to the extent applicable: (i) electric generators which may include equipment such as fuel cells or solar photovoltaic equipment; (ii) turbines; (iii) step-up transformers; (iv) relay panels (v) distributed control systems; and (vi) any other single piece of equipment or system such as a cooling water system, steam generation, steam handling system, water treatment system, fuel handling system or emissions control system that is not included as a sub-component of other equipment listed in this Section III.13.1.1.2.2.2(c) and that accounts for more than five percent of the total project cost. For an Import Capacity Resource associated with an Elective Transmission Upgrade that has not yet achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, major components shall also include, to the extent applicable, transmission facilities and associated substation equipment.
- (d) **Substantial Site Construction**. In the New Capacity Qualification Package, the Project Sponsor must provide the approximate date on which the amount of money expended on construction activities occurring on the project site is expected to exceed 20 percent of construction financing costs.
- (e) **Major Equipment Delivery**. In the New Capacity Qualification Package, the Project Sponsor must provide the dates on which the major equipment described in subsection (d) above has been or is scheduled to be delivered to the project site.
- (f) **Major Equipment Testing**. In the New Capacity Qualification Package, the Project Sponsor must provide the date or dates on which each piece of major equipment described in subsection (c) above is scheduled to undergo testing, including major systems testing, as appropriate for the specific technology to establish its suitability to allow, in conjunction with other major equipment, subsequent operation of the project in accordance with the design capacity of the resource and in accordance with Good Utility Practice. The test(s) shall include those conducted at the point at which the operation of the

major equipment will be determined to be in compliance with the requirements of the engineering or purchase specifications.

- (g) **Commissioning**. In the New Capacity Qualification Package, the Project Sponsor must provide the date on which the project is expected to have demonstrated the level of performance specified in the New Capacity Show of Interest Form and in the New Capacity Qualification Package.
- (h) Commercial Operation. In the New Capacity Qualification Package, the Project Sponsor must provide the date by which the project is expected to achieve Commercial Operation (as defined in Schedule 22, 23, or 25 of Section II of the Transmission, Markets and Services Tariff) and/or the date by which the Project Sponsor expects to be ready to demonstrate to the ISO that the Demand Capacity Resource described in the New Demand Capacity Resource Qualification Package has achieved its full demand reduction value. This date must be no later than the start of the Capacity Commitment Period associated with the Forward Capacity Auction.

III.13.1.1.2.2.3. Offer Information.

- (a) All New Generating Capacity Resources that might submit offers in the Forward Capacity Auction at prices below the relevant Offer Review Trigger Price must include in the New Capacity Qualification Package the lowest price at which the resource requests to offer capacity in the Forward Capacity Auction and supporting documentation justifying that price as competitive in light of the resource's costs (as described in Section III.A.21). This price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that Section.
- (b) The Project Sponsor for a New Generating Capacity Resource must indicate in the New Capacity Qualification Package if an offer from the New Generating Capacity Resource may be rationed. A Project Sponsor may specify a Rationing Minimum Limit to which offers may be rationed. Without such indication, offers will only be accepted or rejected in whole. This rationing election shall apply for the entire Forward Capacity Auction.
- (c) By submitting a New Capacity Qualification Package, the Project Sponsor certifies that an offer from the New Generating Capacity Resource will not include any anticipated revenues the resource is

expected to receive for its capacity cost as a Qualified Generator Reactive Resource pursuant to Schedule 2 of Section II of the Transmission, Markets and Services Tariff.

III.13.1.1.2.2.4. Capacity Commitment Period Election.

In the New Capacity Qualification Package, the Project Sponsor must specify whether, if its New Capacity Offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to six additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. For incremental capacity qualified pursuant to Section III.13.1.1.1.3.A, this election shall apply to both the incremental amount of capacity and the existing Qualified Capacity matched to the incremental capacity at the same generating resource. If no such election is made in the New Capacity Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Capacity Offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Capacity Offer clears. If a New Capacity Offer clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.1.2.2.4.

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

- (a) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2 (re-powering), Section III.13.1.1.1.3 (incremental capacity), or Section III.13.1.1.1.4 (de-rated capacity), the Project Sponsor must include in the New Capacity Qualification Package documentation of the costs associated with the project in sufficient detail to allow the ISO to determine that the relevant cost threshold (described in Sections III.13.1.1.1.2(b), III.13.1.1.1.3(b), and III.13.1.1.1.4) will be met.
- (b) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Section III.13.1.1.1.2(c) (environmental compliance), the Project Sponsor must include in the New Capacity Qualification Package: (i) a detailed description of the specific

regulations that it is seeking to comply with and the permits that it must obtain; and (ii) documentation of the costs associated with the project in sufficient detail to allow the ISO to determine that the relevant cost threshold (described in Section III.13.1.1.1.2(c)) will be met.

(c) For each resource seeking to participate in the Forward Capacity Auction as a New Generating Capacity Resource pursuant to Sections III.13.1.1.1.2, III.13.1.1.1.3, or III.13.1.1.1.4, the Project Sponsor must include in the New Capacity Qualification Package detailed information showing how and when the resource will shed its Capacity Supply Obligation to accommodate necessary work on the facility, if necessary. The Project Sponsor must also include the shedding of its Capacity Supply Obligation as an additional milestone in the critical path schedule described in Section III.13.1.1.2.2.2.

III.13.1.1.2.2.6. Additional Requirements for New Generating Capacity Resources that are Intermittent Power Resources.

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

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

III.13.1.1.2.3. Initial Interconnection Analysis.

(a) For each New Generating Capacity Resource, the ISO shall perform an initial interconnection analysis, including an analysis of overlapping interconnection impacts, based on the information provided in the New Capacity Show of Interest Form and shall determine the amount of capacity that the resource could provide by the start of the associated Capacity Commitment Period. The initial interconnection

analysis shall be performed consistent with the criteria and conditions described in ISO New England Planning Procedures, and will include, but will not be limited to, a power flow analysis and a short circuit analysis. No initial interconnection analysis is required where the total requested Qualified Capacity of a New Generating Capacity Resource pursuant to Sections III.13.1.1.2, III.13.1.1.3, III.13.1.1.4, or III.13.1.1.6 can be realized without a Material Modification (as defined in Section 4.4 of Schedule 22, Section 1.5 of Schedule 23 and Section 4.4 of Schedule 25 of Section II of the Transmission, Markets and Services Tariff). The ISO will perform the initial interconnection analysis in the form of a group study that will (i) include all the projects that have submitted a New Capacity Show of Interest Form to participate in the same Capacity Commitment Period (as described in Section 4.1 of Schedule 22 and Section 1.5 of Schedule 23 of Section II of the Transmission, Markets and Services Tariff) and (ii) exclude any existing capacity that will be retired as of the start of the same Capacity Commitment Period. Participation in an initial interconnection analysis is a requirement for obtaining Capacity Network Resource Interconnection Service or Capacity Network Import Interconnection Service in a manner that meets the Capacity Capability Interconnection Standard in accordance with the provisions in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff.

- (b) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide the entire amount of capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period, the New Generating Capacity Resource's Qualified Capacity values may be adjusted accordingly, as described in Section III.13.1.1.2.5.
- (c) If as a result of the initial interconnection analysis, the ISO determines that the interconnection facilities and upgrades identified in the qualification process that are necessary to enable the New Generating Capacity Resource to provide capacity indicated in the New Capacity Show of Interest Form can not be implemented before the start of the Capacity Commitment Period and the New Generating Capacity Resource can not provide any capacity without those facilities and upgrades, the resource shall not be accepted for participation in the Forward Capacity Auction. In this case, the ISO will provide an explanation of its determination in the qualification determination notification, discussed in Section III.13.1.1.2.8.

- (d) If as a result of the initial interconnection analysis, the ISO determines that the New Generating Capacity Resource can provide all or some of the capacity indicated in the New Capacity Show of Interest Form by the start of the Capacity Commitment Period, and if the New Generating Capacity Resource is accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1, then in the qualification determination notification, discussed in Section III.13.1.1.2.8, the ISO, after consultation with the applicable Transmission Owner(s) or Elective Transmission Upgrade Interconnection Customer as appropriate, shall include a list of the facilities that may be required to complete the interconnection and time required to construct those facilities by the start of the associated Capacity Commitment Period.
- (e) Where, as a result of the initial interconnection analysis, the ISO concludes, after consultation with the Project Sponsor and the applicable Transmission Owner(s) or Elective Transmission Upgrade Interconnection Customer, as appropriate, that the capacity indicated in the New Capacity Show of Interest Form can not be interconnected by the commencement of the Capacity Commitment Period, the Forward Capacity Market qualification process for that resource shall be terminated and the ISO will notify the Project Sponsor of such termination.
- (f) Where, as a result of the initial interconnection analysis, the ISO determines that because of overlapping interconnection impacts, New Generating Capacity Resources that are otherwise accepted for participation in the Forward Capacity Auction in accordance with the other provisions and requirements of this Section III.13.1 cannot provide the full amount of capacity that they each would otherwise be able to provide (in the absence of the other relevant Existing Generating Capacity Resources and New Generating Capacity Resources seeking to qualify for the Forward Capacity Auction), those New Generating Capacity Resources will be accepted for participation in the Forward Capacity Auction on the basis of their Queue Position, as described in Schedules 22, 23 and 25 of Section II of the Transmission, Markets and Services Tariff, with priority given to resources that entered the queue earlier. Resources with lower priority in the queue may be accepted partially. Starting with the fourth auction, a New Generating Capacity Resource that meets the requirements of this Section III.13.1, but that would not be accepted for participation in the Forward Capacity Auction as a result of overlapping interconnection impacts with another resource having a higher priority in the queue may be accepted for participation in the Forward Capacity Auction as a Conditional Qualified New Resource, as described in Section III.13.2.3.2(f), provided that the resource having a higher priority in the queue is not a resource offering capacity into the Forward Capacity Auction pursuant to Section III.13.2.3.2(e).

III.13.1.1.2.4. Evaluation of New Capacity Qualification Package.

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

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

III.13.1.1.2.5. Qualified Capacity for New Generating Capacity Resources.

III.13.1.1.2.5.1. New Generating Capacity Resources Other Than Intermittent Power Resources.

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

III.13.1.1.2.5.2. [Reserved]

III.13.1.1.2.5.3. New Generating Capacity Resources that are Intermittent Power Resources.

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

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

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

III.13.1.1.2.6. [Reserved.]

III.13.1.1.2.7. Opportunity to Consult with Project Sponsor.

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

periods established for the qualification process. In addition, the ISO or the Project Sponsor may confer to seek clarification, to gather additional necessary information, or to address questions or concerns prior to the ISO's final determination and notification of qualification.

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

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

- (a) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the initial interconnection analysis made pursuant to Section III.13.1.1.2.3, and if not accepted, an explanation of the reasons the New Generating Capacity Resource was not accepted in the initial interconnection analysis;
- (b) whether the New Generating Capacity Resource has been accepted for participation in the Forward Capacity Auction as a result of the New Capacity Qualification Package evaluation made pursuant to Section III.13.1.1.2.4, and if not accepted, an explanation of the reasons the New Generating Capacity Resource's New Capacity Qualification Package was not accepted;
- (c) if accepted for participation in the Forward Capacity Auction, a list of the facilities that may be required to complete the interconnection for purposes of providing capacity and time required to construct those facilities by the start of the associated Capacity Commitment Period, as discussed in Section III.13.1.1.2.3(d);
- (d) if accepted for participation in the Forward Capacity Auction, the New Generating Capacity Resource's summer Qualified Capacity and winter Qualified Capacity, as determined pursuant to Section III.13.1.1.2.5;
- (e) if accepted for participation in the Forward Capacity Auction, but subject to the provisions of Section III.13.1.1.2.3(f) (where not all New Generating Capacity Resources can be interconnected due to their combined effects on the New England Transmission System), a description of how the New Generating Capacity Resource shall participate in the Forward Capacity Auction, including, for the fourth and future auctions: (i) whether the resource shall participate as a Conditional Qualified New Resource;

- (ii) for the notification to a Conditional Qualified New Resource, the Queue Position of the associated resource with higher queue priority; and (iii) for the notification to a resource with higher queue priority than a Conditional Qualified New Resource, the Queue Position of the Conditional Qualified New Resource; and
- (f) if accepted for participation in the Forward Capacity Auction and requesting to submit offers at prices below the relevant Offer Review Trigger Price pursuant to Section III.13.1.1.2.2.3, the Internal Market Monitor's determination regarding whether the requested offer price is consistent with the long run average costs of that New Generating Capacity Resource.

III.13.1.1.2.9 Renewable Technology Resource Election.

A Project Sponsor or Market Participant may not elect Renewable Technology Resource treatment for the FCA associated with a Capacity Commitment Period beginning on or after June 1, 2025.

A Project Sponsor or Market Participant electing Renewable Technology Resource treatment for the FCA Qualified Capacity of a New Generating Capacity Resource or New Demand Capacity Resource shall submit a Renewable Technology Resource election form no later than two Business Days after the date on which the ISO provides qualification determination notifications pursuant to Section III.13.1.1.2.8 or Section III.13.1.4.1.1.6. Only the portion of the FCA Qualified Capacity of the resource that meets the requirements of Section III.13.1.1.1.7 is eligible for treatment as a Renewable Technology Resource.

Renewable Technology Resource elections may not be modified or withdrawn after the deadline for submission of the Renewable Technology Resource election form.

The submission of a Renewable Technology Resource election that satisfies the requirements of Section III.13.1.1.1.7 will invalidate a prior multi-year Capacity Supply Obligation and Capacity Clearing Price election for the same resource made pursuant to Section III.13.1.4.1.1.2.7 or Section III.13.1.1.2.2.4 for a Forward Capacity Auction.

III.13.1.1.2.10 Determination of Renewable Technology Resource Qualified Capacity.

- (a) If the total FCA Qualified Capacity of Renewable Technology Resources exceeds the cap specified in subsections (b), (c), (d) and (e) the qualified capacity value of each resource shall be prorated by the ratio of the cap divided by the total FCA Qualified Capacity. The ISO shall notify the Project Sponsor or Market Participant, as applicable, of the Qualified Capacity value of its resource no more than five Business Days after the deadline for submitting Renewable Technology Resource elections.
- (b) The cap for the Capacity Commitment Period beginning on June 1, 2018 is 200 MW.
- (c) The cap for the Capacity Commitment Period beginning on June 1, 2019 is 400 MW minus the amount of Capacity Supply Obligations acquired by Renewable Technology Resources that are New Capacity Resources pursuant to Section III.13.2 in the prior Capacity Commitment Period.
- (d) The cap for each Capacity Commitment Period beginning on June 1, 2020 or June 1, 2021 is 600 MW minus the amount of Capacity Supply Obligations acquired by Renewable Technology Resources that are New Capacity Resources pursuant to Section III.13.2 in the prior two Capacity Commitment Periods.
- (e) The cap for each Capacity Commitment Period beginning on June 1, 2022 or June 1, 2023 or June 1, 2024 is 514 MW minus the cumulative amount of Capacity Supply Obligations acquired by Renewable Technology Resources that are New Capacity Resources in the first or second run of the primary auction-clearing process pursuant to Section III.13.2 for each Capacity Commitment Period that begins on or after June 1, 2021.

III.13.1.2. Existing Generating Capacity Resources.

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

III.13.1.2.1. Definition of Existing Generating Capacity Resource.

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

III.13.1.2.1.1. Attributes of Existing Generating Capacity Resources.

For purposes of Forward Capacity Auction qualification, a Market Participant may not change any Existing Generating Capacity Resource attribute (including but not limited to the resource's status as an Intermittent Power Resource) in the period beginning 20 Business Days prior to the Existing Capacity Retirement Deadline and ending with the conclusion of the Forward Capacity Auction. Outside of this period, any such change must be accompanied by documentation justifying the change.

III.13.1.2.1.2 Rationing Minimum Limit.

No later than 120 days before the Forward Capacity Auction Market Participants may specify a Rationing Minimum Limit for an Existing Generating Capacity Resource.

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

III.13.1.2.2.1.1. Summer Qualified Capacity.

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

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

III.13.1.2.2.1.2. Winter Qualified Capacity.

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

III.13.1.2.2.2. Existing Generating Capacity Resources that are Intermittent Power Resources.

The summer and winter Qualified Capacity for an Existing Generating Capacity Resource that is an Intermittent Power Resource shall be calculated as follows:

III.13.1.2.2.2.1. Summer Qualified Capacity for an Intermittent Power Resource.

(a) With regard to any Forward Capacity Auction qualification process, for each of the previous five summer periods, the ISO shall determine the median of the Intermittent Power Resource's net output in the Summer Intermittent Reliability Hours. If there are less than five full summer periods since the Intermittent Power Resource achieved FCM Commercial Operation, the ISO shall determine the median

of the Intermittent Power Resource's net output in each of the previous summer periods, or portion thereof, since the Intermittent Power Resource achieved FCM Commercial Operation.

- (b) The Intermittent Power Resource's summer Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.1(a).
- (c) The Summer Intermittent Reliability Hours shall be hours ending 1400 through 1800 each day of the summer period (June through September) and all summer period hours in which there was a system-wide Capacity Scarcity Condition and if the Intermittent Power Resource was in an import-constrained Capacity Zone, all Capacity Scarcity Conditions in that Capacity Zone.
- (d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource there are no previous positive summer Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource had not yet achieved FCM Commercial Operation, then the Existing Generating Capacity Resource's summer Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

III.13.1,2.2.2.2. Winter Qualified Capacity for an Intermittent Power Resource.

- (a) With regard to any Forward Capacity Auction qualification process, for each of the previous five winter periods, the ISO shall determine the median of the Intermittent Power Resource's net output in the Winter Intermittent Reliability Hours. If there are less than five full winter periods since the Intermittent Power Resource achieved FCM Commercial Operation, the ISO shall determine the median of the Intermittent Power Resource's net output in each of the previous winter periods, or portion thereof, since the Intermittent Power Resource achieved FCM Commercial Operation.
- (b) The Intermittent Power Resource's winter Qualified Capacity shall be the average of the median numbers determined in Section III.13.1.2.2.2.2(a).
- (c) The Winter Intermittent Reliability Hours shall be hours ending 1800 and 1900 each day of the winter period (October through May) and all winter period hours in which there was a system-wide Capacity Scarcity Condition and if the Intermittent Power Resource was in an import-constrained Capacity Zone, all Capacity Scarcity Conditions in that Capacity Zone.

(d) If for an Existing Generating Capacity Resource that is an Intermittent Power Resource there are no previous positive winter Seasonal Claimed Capability ratings because the Existing Generating Capacity Resource had not yet achieved FCM Commercial Operation, then the Existing Generating Capacity Resource's winter Qualified Capacity shall be equal to the amount of capacity clearing from the resource as a New Generating Capacity Resource in previous Forward Capacity Auctions.

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

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

Capacity shall be calculated as described in Section III.13.1.2.2.1.2, except that no data from the time period prior to the New Generating Capacity Resource's FCM Commercial Operation date shall be used to determine the winter Qualified Capacity associated with the Existing Generating Capacity Resource.

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

Where the most recent summer Seasonal Claimed Capability, as of the fifth Business Day in October, of an Existing Generating Capacity Resource (other than a Settlement Only Resource or an Intermittent Power Resource) is below its summer Qualified Capacity, as determined pursuant to Section III.13.1.2.2.1.1, by:

- (1) for Capacity Commitment Periods beginning prior to June 1, 2023, more than the lesser of 20 percent of that summer Qualified Capacity or 40 MW;
- (2) for Capacity Commitment Periods beginning on or after June 1, 2023, more than the lesser of:
 - (i) the greater of 10 percent of that summer Qualified Capacity or two MW, or;
 - (ii) 10 MW;

then the Lead Market Participant must elect one of the two treatments described in this Section III.13.1.2.2.4 by the Existing Capacity Retirement Deadline. If the Lead Market Participant makes no election, or elects treatment pursuant to Section III.13.1.2.2.4(c) and fails to meet the associated requirements, then the treatment described in Section III.13.1.2.2.4(a) shall apply.

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

Capacity Auction. For an Existing Generating Capacity Resource subject to this election, the critical path schedule monitoring provisions of Section III.13.3 shall apply.

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

Where an Existing Generating Capacity Resource (other than a Settlement Only Resource) meets the requirements of Section III.13.1.1.1.3(a) but not the requirements of Section III.13.1.1.1.3(b), the Lead Market Participant may elect to have the Existing Generating Capacity Resource's summer Qualified Capacity be the sum of [the median of that Existing Generating Capacity Resource's positive summer Seasonal Claimed Capability ratings from the most recent five years, as of the fifth Business Day in October of each year, calculated in a manner consistent with Section III.13.1.2.2.1.1] plus [the amount of incremental capacity as described in Section III.13.1.1.1.3(a)]; provided, however, that the Lead Market Participant must abide by all other provisions of this Section III.13 applicable to a resource that is a New Generating Capacity Resource pursuant to Section III.13.1.1.1.3. Such an election must be made in writing and must be received by the ISO no later than the close of the New Capacity Show of Interest Submission Window. If the incremental amount of capacity seeking to participate in the Forward Capacity Auction meets the requirements of this Section, but the incremental amount of capacity does not span the entire Capacity Commitment Period, then the ISO shall match the incremental amount of capacity with excess Qualified Capacity at that same resource, not to exceed the Qualified Capacity of the existing portion of the resource, in order to cover the entire Capacity Commitment Period. This provision shall not apply to Intermittent Power Resources.

III.13.1.2.2.5.1. [Reserved.]

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

Demand Capacity Resource or Existing Import Capacity Resource Having a

Higher Summer Qualified Capacity than Winter Qualified Capacity.

Where an Existing Generating Capacity Resource, Existing Demand Capacity Resource, or Existing Import Capacity Resource (other than an Intermittent Power Resource) has a summer Qualified Capacity that exceeds its winter Qualified Capacity, both as calculated pursuant to this Section III.13.1.2.2, then that resource must either: (i) offer its summer Qualified Capacity as part of an offer composed of separate resources, as discussed in Section III.13.1.5; or (ii) have its FCA Qualified Capacity administratively set by the ISO to the lesser of its summer Qualified Capacity and winter Qualified Capacity.

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

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

III.13.1.2.3.1. Existing Capacity Retirement Package and Existing Capacity Qualification Package.

A resource that previously has been deactivated pursuant to Section I.3.9 of the Transmission, Markets and Services Tariff (or its predecessor provisions) and seeks to reactivate and participate in the Forward Capacity Market as an Existing Generating Capacity Resource must submit a reactivation plan no later than 10 Business Days before the Existing Capacity Retirement Deadline, as described in Section III.13.1.1.1.6(b). All Permanent De-List Bids and Retirement De-List Bids in the Forward Capacity Auction must be detailed in an Existing Capacity Retirement Package submitted to the ISO no later than the Existing Capacity Retirement Deadline. All Static De-List Bids, Export Bids and Administrative Export De-List Bids in the Forward Capacity Auction must be detailed in an Existing Capacity Qualification Deadline. Permanent De-List Bids and Retirement De-List Bids may not be modified or withdrawn after the Existing Capacity Retirement Deadline, except as provided for in Section III.13.1.2.4.1. All Static De-List Bids, Export Bids, and Administrative Export De-List Bids submitted in the qualification process may not be modified or withdrawn after the Existing Capacity Qualification Deadline, except as provided for in

Section III.13.1.2.3.1.1. An Existing Generating Capacity Resource may not submit a Static De-List Bid, Export Bid, Administrative Export De-List Bid, Permanent De-List Bid, or Retirement De-List Bid for an amount of capacity greater than its summer Qualified Capacity, unless the submittal is for the entire resource. Where a resource elected pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.1.1.2.7 to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, the capacity associated with any resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply. For a single resource, a Lead Market Participant may combine a Static De-List Bid, an Export Bid, and an Administrative Export De-List Bid; neither a Permanent De-List Bid nor a Retirement De-List Bid may be combined with any other type of de-list or export bid.

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

III.13.1.2.3.1.A Dynamic De-List Bid Threshold.

For the fifteenth Forward Capacity Auction (for the Capacity Commitment Period beginning June 1, 2024), the Dynamic De-List Bid Threshold is \$4.30/kW-month. For each Forward Capacity Auction thereafter, the Dynamic De-List Bid Threshold shall be calculated as described below in this Section III.13.1.2.3.1.A, and shall be published to the ISO's website no later than 5 Business Days before the Existing Capacity Retirement Deadline. This publication shall include the preliminary value calculated pursuant to subsection (a) below, whether the preliminary value was constrained by either of the limitations described in subsection (b) below, the margin value as calculated pursuant to subsection (c) below, and the final value as calculated pursuant to subsection (d) below.

(a) Subject to the limitations described in subsection (b) below, a preliminary value of the Dynamic De-List Bid Threshold shall be calculated as the average of: (i) the Capacity Clearing Price for the Rest-

of-Pool Capacity Zone from the immediately preceding Forward Capacity Auction (provided, however, that if there is a second run of the primary auction-clearing process pursuant to Section III.13.2.5.2.1(d), the resulting Rest-of-Pool Capacity Zone clearing price from that run shall be used instead); and (ii) the price at which the total amount of capacity clearing in the immediately preceding Forward Capacity Auction intersects the estimated System-Wide Capacity Demand Curve for the upcoming Forward Capacity Auction. For this purpose, the estimated System-Wide Capacity Demand Curve shall be constructed, in the same manner as described in Section III.13.2.2.1, using the system-wide Marginal Reliability Impact values from the immediately preceding Forward Capacity Auction, the most recent estimate of the Installed Capacity Requirement (net of HQICCs) for the upcoming Forward Capacity Auction, and the Net CONE and Forward Capacity Auction Starting Price for the upcoming Forward Capacity Auction.

- (b) The preliminary value of the Dynamic De-List Bid Threshold shall not be higher than 75 percent of the Net CONE value for the upcoming Forward Capacity Auction. The preliminary value of the Dynamic De-List Bid Threshold shall not be lower than 75 percent of the clearing price applicable pursuant to (a)(i) of this Section III.13.1.2.3.1.A, except as needed to ensure that it is not higher than 75 percent of the Net CONE value for the upcoming Forward Capacity Auction.
- (c) A margin value shall be calculated using the following formula:

$$Margin = \$1/kW\text{-}month \times \left[\frac{\left(75\% \times Net\ CONE_{upcoming\ FCA}\right) - DDBT_{preliminary}}{\left(75\% \times Net\ CONE_{upcoming\ FCA}\right)} \right]$$

(d) The final value of the Dynamic De-List Bid Threshold for the upcoming Forward Capacity Auction shall be equal to the preliminary value of the Dynamic De-List Bid Threshold calculated pursuant to Sections III.13.1.2.3.1.A(a) and III.13.1.2.3.1.A(b) plus the margin value calculated pursuant to Section III.13.1.2.3.1.A(c).

III.13.1.2.3.1.1. Static De-List Bids.

A Lead Market Participant with an Existing Capacity Resource, or a portion thereof, seeking to specify a price below which it would not accept a Capacity Supply Obligation for that resource, or a portion thereof, at prices at or above the Dynamic De-List Bid Threshold during a single Capacity Commitment Period may submit a Static De-List Bid in the associated Forward Capacity Auction qualification process. A Static De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Rationing Minimum Limit except where the resource submits de-list and export bids totaling the

resource's full summer Qualified Capacity. Each Static De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five price-quantity pairs). The curve may in no case increase the quantity offered as the price decreases. All Static De-List Bids are subject to a reliability review as described in Section III.13.2.5.2.5. Static De-List Bids are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional documentation described in that section. With the submission of a Static De-List Bid, the Lead Market Participant must notify the ISO if the Existing Capacity Resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period (except for necessary audits or tests).

No later than seven days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.2.4(b), a Lead Market Participant that submitted a Static De-List Bid may:
(a) lower the price of any price-quantity pair of a Static De-List Bid, provided that the revised price is greater than or equal to the Dynamic De-List Bid Threshold, or; (b) withdraw any price-quantity pair of a Static De-List Bid.

III.13.1.2.3.1.2. [Reserved.]

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 a Renewable Technology 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 qualification process. An Export Bid may not result in a resource's Capacity Supply Obligation being less than its Rationing 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 at or above the Dynamic De-List Bid Threshold are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2 and must include the additional information described in that Section. Each Export Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, and must be in the form of a curve (up to five price-quantity pairs) associated with a specific Existing Generating Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. Each price-quantity pair must be less than the Forward Capacity Auction Starting Price. The Existing Capacity Qualification Package for each Export Bid must also specify the

interface over which the capacity will be exported. Export Bids shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(b).

III.13.1.2.3.1.4. Administrative Export De-List Bids.

An Existing Generating Capacity Resource other than an Intermittent Power Resource or a Renewable Technology Resource subject to a multiyear contract to sell capacity outside of the New England Control Area during the Capacity Commitment Period that either: (i) cleared as an Export Bid in a previous Forward Capacity Auction for a Capacity Commitment Period within the duration of the contract; or (ii) entered into a contract prior to April 30, 2007 to sell capacity outside of the New England Control Area during the Capacity Commitment Period, may submit an Administrative Export De-List Bid in the associated Forward Capacity Auction qualification process. An Administrative Export De-List Bid may not result in a resource's Capacity Supply Obligation being less than its Rationing Minimum Limit except where the resource submits de-list and export bids totaling the resource's full summer Qualified Capacity. Unless reviewed as an Export Bid in a previous Forward Capacity Auction, an Administrative Export De-List Bid is subject to a reliability review prior to clearing in a Forward Capacity Auction, as described in Section III.13.2.5.2.5, and is subject to review by the Internal Market Monitor in the first Forward Capacity Auction in which it participates, pursuant to Section III.13.1.7. Both the reliability review and the review by the Internal Market Monitor shall be conducted once and shall remain valid for the multiyear contract period. Each Administrative Export De-List Bid must be detailed in an Existing Capacity Qualification Package submitted to the ISO no later than the Existing Capacity Qualification Deadline, must be associated with a specific Existing Generating Capacity Resource, and must indicate the quantity of capacity subject to the bid. The Existing Capacity Qualification Package for each Administrative Export De-List Bid must also specify the interface over which the capacity will be exported, and must include documentation demonstrating a contractual obligation to sell capacity outside of the New England Control Area during the whole Capacity Commitment Period. Administrative Export De-List Bids shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.5.2.4.

III.13.1.2.3.1.5. Permanent De-List Bids and Retirement De-List Bids.

(a) A Lead Market Participant with an Existing Capacity Resource seeking to specify a price at or below which it would not accept a Capacity Supply Obligation permanently for all or part of a Generating Capacity Resource beginning at the start of a particular Capacity Commitment Period may submit a Permanent De-List Bid in the associated Forward Capacity Auction qualification process.

- (b) A Lead Market Participant with an Existing Capacity Resource seeking to specify a price at or below which it would retire all or part of a Generating Capacity Resource from all New England Markets beginning at the start of a particular Capacity Commitment Period may submit a Retirement De-List Bid in the associated Forward Capacity Auction qualification process.
- No Permanent De-List Bid or Retirement De-List Bid may result in a resource's Capacity Supply Obligation being less than its Rationing Minimum Limit unless the Permanent De-List Bid or Retirement De-List Bid is for the entire resource. Each Permanent De-List Bid and Retirement De-List Bid must be detailed in an Existing Capacity Retirement Package submitted to the ISO no later than the Existing Capacity Retirement Deadline, and must be in the form of a curve (up to five price-quantity pairs) associated with a specific Existing Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. Permanent De-List Bids and Retirement De-List Bids are subject to review by the Internal Market Monitor pursuant to Section III.13.1.2.3.2.1 and must include the additional documentation described in that section. Once submitted, no Permanent De-List Bid or Retirement De-List Bid may be withdrawn, except as provided in Section III.13.1.2.4.1.

III.13.1.2.3.1.5.1. Reliability Review of Permanent De-List Bids and Retirement De-List Bids During the Qualification Process.

During the qualification process, the ISO will review the following de-list bids to determine if the resource is needed for reliability: (1) Internal Market Monitor-accepted Permanent De-List Bids and Internal Market Monitor-accepted Retirement De-List Bids that are at or above the Forward Capacity Auction Starting Price; and (2) Permanent De-List Bids and Retirement De-List Bids for which the Lead Market Participant has opted to have the resource reviewed for reliability as described in Section III.13.1.2.4.1(a) or Section III.13.1.2.4.1(b). The reliability review will be conducted according to Section III.13.2.5.2.5, except as follows:

- (a) Permanent De-List Bids and Retirement De-List Bids that cannot be priced (for example, due to the expiration of an operating license) will be reviewed first.
- (b) System needs associated with Permanent De-List Bids and Retirement De-List Bids for resources found needed for reliability reasons pursuant to this Section III.13.1.2.3.1.5.1 will be reviewed with the Reliability Committee during the month of August following the issuance of retirement determination notifications pursuant to Section III.13.1.2.4(a). The Lead Market Participant shall be notified as soon as

practicable following the ISO's consultation with the Reliability Committee that the capacity associated with a Permanent De-List Bid or Retirement De-List Bid is needed for reliability reasons.

- (c) If the capacity associated with a Permanent De-List Bid or Retirement De-List Bid is needed for reliability reasons pursuant to this Section III.13.1.2.3.1.5.1, the de-list bid shall be rejected and the resource shall be entered into the Forward Capacity Auction pursuant to Section III.13.2.3.2(c) and compensated according to Section III.13.2.5.2.5, unless the resource declines to be retained for reliability, as provided in Section III.13.1.2.3.1.5.1(d).
- (d) No later than the fifth Business Day in the month of September following the review of system needs with the Reliability Committee per (b) above, a Lead Market Participant may notify the ISO that it declines to provide the associated capacity for reliability. Such an election will be binding. A resource for which a Lead Market Participant has made such an election will not be eligible for compensation pursuant to Sections III.13.2.5.2.5.1 or III.13.2.5.2.5.2.
- (e) Where a resource is determined not to be needed for reliability or where a Lead Market Participant notifies the ISO that it declines to provide capacity for reliability pursuant to Section III.13.1.2.3.1.5.1(d), the capacity associated with the Permanent De-List Bid or Retirement De-List Bid will be treated as follows:
 - (i) For a Retirement De-List Bid at or above the Forward Capacity Auction Starting Price, or a Permanent De-List Bid or Retirement De-List Bid for which a Lead Market Participant has elected to retire the resource pursuant to Section III.13.1.2.4.1(a), the portion of the resource subject to the de-list bid will be retired as permitted by applicable law coincident with the commencement of the Capacity Commitment Period for which the de-list bid was submitted, as described in Section III.13.2.5.2.5.3(a).
 - (ii) For a Permanent De-List Bid at or above the Forward Capacity Auction Starting Price for which a Lead Market Participant has not elected to retire the resource pursuant to Section III.13.1.2.4.1(a), the portion of the resource subject to the de-list bid will be permanently de-listed coincident with the commencement of the Capacity Commitment Period for which the de-list bid was submitted, as described in Section III.13.2.5.2.5.3(b).

(iii) For a Permanent De-List Bid or Retirement De-List Bid for which a Lead Market Participant has elected conditional treatment pursuant to Section III.13.1.2.4.1(b), the de-list bid will continue to receive conditional treatment as described in Section III.13.1.2.4.1(b), Section III.13.2.3.2(b)(ii), and Section III.13.2.5.2.1.

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

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

III.13.1.2.3.1.6.1. Submission of Cost Data.

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

III.13.1.2.3.1.6.2. [Reserved.]

III.13.1.2.3.1.6.3. Internal Market Monitor Review of Stations having Common Costs.

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

- (i) Calculate the average Asset-Specific Going Forward Costs of each asset at the Station.
- (ii) Order the assets from highest average Asset-Specific Going Forward Costs to lowest average Asset-Specific Going Forward Costs; this is the preferred de-list order.

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

The Internal Market Monitor will adjust the set of composite costs to ensure a monotonically non-increasing set of bids as follows: any asset with a composite cost that is greater than the composite cost of the asset with the lowest composite cost and that has average Asset-Specific Going Forward Costs that are less than its composite costs will have its composite cost set equal to that of the asset with the lowest composite cost. The bids of the asset with the lowest composite cost and of any assets whose composite costs are so adjusted will be considered a single non-rationable bid for use in the Forward Capacity Auction.

The Internal Market Monitor will compare a de-list bid developed using the adjusted composite costs to the de-list bid submitted by the Existing Generating Capacity Resource that is associated with a Station having Common Costs. If the Internal Market Monitor determines that the submitted de-list bid is less than or equal to the bid developed using the adjusted composite costs, then the bid shall be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b). If the Internal Market Monitor determines that the submitted de-list bid is greater than the bid developed using the adjusted composite costs or is not consistent with the submitted supporting cost data, then the Internal Market Monitor will establish an Internal Market Monitor-determined or Internal Market Monitor—accepted price for the bid as described in Section III.13.1.2.3.2.1.

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

The Internal Market Monitor shall review bids for Existing Capacity Resources as follows.

III.13.1.2.3.2.1. Static De-List Bids and Export Bids, Permanent De-List Bids, and Retirement De-List Bids at or Above the Dynamic De-List Bid Threshold.

The Internal Market Monitor shall review each Static De-List Bid and each Export Bid at or above the Dynamic De-List Bid Threshold to determine whether the bid is consistent with: (1) the Existing Capacity

Resource's net going forward costs (as determined pursuant to Section III.13.1.2.3.2.1.2.A); (2) reasonable expectations about the resource's Capacity Performance Payments (as determined pursuant to Section III.13.1.2.3.2.1.3); (3) reasonable risk premium assumptions (as determined pursuant to Section III.13.1.2.3.2.1.4); and (4) the resource's reasonable opportunity costs (as determined pursuant to Section III.13.1.2.3.2.1.5).

The Internal Market Monitor shall review each Permanent De-List Bid greater than 20 MW that is at or above the Dynamic De-List Bid Threshold and each Retirement De-List Bid greater than 20 MW that is at or above the Dynamic De-List Bid Threshold to determine whether the bid is consistent with: (1) the net present value of the resource's expected cash flows (as determined pursuant to Section III.13.1.2.3.2.1.2.B); (2) reasonable expectations about the resource's Capacity Performance Payments (as determined pursuant to Section III.13.1.2.3.2.1.3); and (3) the resource's reasonable opportunity costs (as determined pursuant to Section III.13.1.2.3.2.1.5). If more than one Permanent De-List Bid or Retirement De-List Bid is submitted by a single Lead Market Participant or its Affiliates (as used in Section III.A.24), the Internal Market Monitor shall review each such bid at or above the Dynamic De-List Bid Threshold if the sum of all such bids at or above the Dynamic De-List Bid Threshold is greater than 20 MW. The Internal Market Monitor shall review each Permanent De-List Bid and each Retirement De-List Bid submitted at any price pursuant to Section III.13.2.5.2.1(b) if the sum of the Permanent De-List Bids and Retirement De-List Bids submitted by the Lead Market Participant or its Affiliates (as used in Section III.A.24) is greater than 20 MW. Permanent De-List Bids and Retirement De-List Bids that are not reviewed by the Internal Market Monitor shall be included in the retirement determination notification described in Section III.13.1.2.4(a) and in the filing made to the Commission as described in Section III.13.8.1(a).

Sufficient documentation and information about each bid component must be included in the Existing Capacity Retirement Package or the Existing Capacity Qualification Package to allow the Internal Market Monitor to make the requisite determinations. If a Permanent De-List Bid or Retirement De-List Bid is submitted pursuant to Section III.13.2.5.2.1(b), all relevant updates to previously submitted documentation and information must be provided to support the newly submitted price and allow the Internal Market Monitor to make updated determinations. The updated information may include a request to discontinue the Permanent De-List Bid or Retirement De-List Bid such that it will not be entered into the Forward Capacity Auction, in which case the update must include sufficient supporting information

on the nature of resource investments that were undertaken, or other materially changed circumstances, to allow the Internal Market Monitor to determine whether discontinuation is appropriate.

The entire de-list submittal shall be accompanied by an affidavit executed by a corporate officer attesting to the accuracy of its content, including reported costs, 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 the reasonableness of the expectations and assumptions regarding Capacity Performance Payments, cash flows, opportunity costs, and risk premiums, and shall be subject to audit upon request by the ISO.

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

The Internal Market Monitor may seek additional information from the Lead Market Participant (including information about the other existing or potential new resources controlled by the Lead Market Participant) after the qualification deadline to address any questions or concerns regarding the data submitted, as appropriate. The Internal Market Monitor shall review all relevant information (including data, studies, and assumptions) to determine whether the bid is consistent with the resource's net going forward costs, reasonable expectations about the resource's Capacity Performance Payments, reasonable risk premium assumptions, and reasonable opportunity costs. In making this determination, the Internal Market Monitor shall consider, among other things, industry standards, market conditions (including published indices and projections), resource-specific characteristics and conditions, portfolio size, and consistency of assumptions across that portfolio.

III.13.1.2.3.2.1.1.1. Review of Static De-List Bids and Export Bids.

The Internal Market Monitor shall review Static De-List Bids and Export Bids and, after due consideration and consultation with the Lead Market Participant, as appropriate, shall develop an Internal Market Monitor-accepted Static De-List Bid or an Internal Market Monitor-accepted Export Bid. The Internal Market Monitor-accepted Static De-List Bid and Internal Market Monitor-accepted Export Bid shall be equal to the Static De-List Bid or Export Bid submitted by the Lead Market Participant unless the de-list bid price(s) submitted by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted de-list bid price(s) for the same de-list bid. If the de-list bid price(s) submitted by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted de-list bid price(s), the Internal Market Monitor shall calculate an Internal Market Monitor-accepted Static De-List Bid or Internal Market-Monitor-accepted Export Bid that is consistent with the sum of the

resource's net going forward costs plus reasonable expectations about the resource's Capacity Performance Payments plus reasonable risk premium assumptions plus reasonable opportunity costs.

If an Internal Market Monitor-determined price is established for a Static De-List Bid or an Export Bid, 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(c) shall include an explanation of the Internal Market Monitor-determined price based on the Internal Market Monitor review and the resource's net going forward costs, reasonable expectations about the resource's Capacity Performance Payments, reasonable risk premium assumptions, and reasonable opportunity costs as determined by the Internal Market Monitor.

III.13.1.2.3.2.1.1.2. Review of Permanent De-List Bids and Retirement De-List Bids.

The Internal Market Monitor shall review those Permanent De-List Bids and Retirement De-List Bids identified in Section III.13.1.2.3.2.1 and, after due consideration and consultation with the Lead Market Participant, as appropriate, shall develop an Internal Market Monitor-accepted Permanent De-List Bid or an Internal Market Monitor-accepted Retirement De-List Bid. The Internal Market Monitor-accepted Permanent De-List Bid and Internal Market Monitor-accepted Retirement De-List Bid shall be equal to the Permanent De-List Bid or Retirement De-List Bid submitted by the Lead Market Participant unless the de-list bid price(s) submitted by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted de-list bid price(s) for the same de-list bid. If the de-list bid price(s) submitted by the Lead Market Participant are more than 10% greater than the Internal Market Monitor-accepted de-list bid price(s), the Internal Market Monitor-accepted Retirement De-List Bid or Internal Market-Monitor-accepted Retirement De-List Bid that is consistent with the sum of the net present value of the resource's expected cash flows plus reasonable expectations about the resource's Capacity Performance Payments plus reasonable opportunity costs.

The retirement determination notification described in Section III.13.1.2.4(a) and the filing made to the Commission as described in Section III.13.8.1(a) shall include an explanation of the Internal Market Monitor-accepted price and the Internal Market Monitor determination on any request to discontinue the Permanent De-List Bid or Retirement De-List Bid.

III.13.1.2.3.2.1.2.A. Static De-List Bid and Export Bid Net Going Forward Costs.

The Lead Market Participant for an Existing Capacity Resource that submits a Static De-List Bid or an Export Bid at or above the Dynamic De-List Bid Threshold that is to be reviewed by the Internal Market Monitor shall report expected net going forward costs for the applicable Capacity Commitment Period in a manner and format specified by the Internal Market Monitor, and may supplement this information with other evidence. A Static De-List Bid or Export Bid at or above the Dynamic De-List Bid Threshold shall be considered consistent with the Existing Capacity Resource's net going forward costs based on a review of the data submitted in the following formula.

Net Going Forward Costs =

 $(GFC-IMR) \times InfIndex$

 $(CQ_{Summer}, kw) \times (12 months)$

Where:

GFC = annual going forward costs, in dollars. These are the expected costs and capital expenditures that might otherwise be avoided or not incurred if the resource were not subject to the obligations of a resource with a Capacity Supply Obligation during the Capacity Commitment Period (i.e., maintaining a constant condition of being ready to respond to commitment and dispatch orders). Costs that are not avoidable in a single Capacity Commitment Period and costs associated with the production of energy are not to be included. Service of debt is not a going forward cost. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only in the absence of a Capacity Supply Obligation may be included. Staffing, maintenance, capital expenses, and other normal expenses that would be avoided only if the resource were not participating in the energy and ancillary services markets may not be included, except in the case of a resource that has indicated in the submission of a Static De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period.

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

IMR = expected annual infra-marginal rents, in dollars. In the case of a resource that has indicated in the submission of a Static De-List Bid that the resource will not be participating in the energy and ancillary services markets during the Capacity Commitment Period, this value shall be calculated by subtracting all

submitted cost data representing the cumulative expected cost of production (total expenses related to the production of energy, e.g. fuel, actual consumables such as chemicals and water, and, if quantified, incremental labor and maintenance) from the Existing Generating Capacity Resource's total ISO market revenues. In the case of a resource that has indicated in the submission of a Static De-List Bid that the resource will be participating in the energy and ancillary services markets during the Capacity Commitment Period, this value shall be \$0.00.

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

Where: "i" is the most recent reported 4- Year expected inflation number published by the Federal Reserve Bank of Cleveland at the beginning of the qualification period. The specific value to be used shall be specified by the ISO and available to the Lead Market Participant.

III.13.1.2.3.2.1.2.B Permanent De-List Bid and Retirement De-List Bid Net Present Value of Expected Cash Flows.

The Lead Market Participant for an Existing Capacity Resource that submits a Permanent De-List Bid or Retirement De-List Bid that is to be reviewed by the Internal Market Monitor shall report all expected costs, revenues, prices, discount rates and capital expenditures in a manner and format specified by the Internal Market Monitor, and may supplement this information with other evidence. The Internal Market Monitor will review the Lead Market Participant's submitted data to ensure that it is consistent with overall market conditions and reflects expected values.

The Internal Market Monitor will adjust any data that are inconsistent with overall market conditions or do not reflect expected values. The Internal Market Monitor shall enter all relevant expected costs, revenues, prices, discount rates and capital expenditures into a capital budgeting model and shall determine the net present value of the Existing Capacity Resource's expected cash flows as follows:

The net present value of the Existing Capacity Resource's expected cash flows is equal to (i) the net present value of the Existing Capacity Resource's net annual expected cash flows over the resource's remaining economic life (as determined pursuant to Section III.13.1.2.3.2.1.2.C) plus the net present value of the resource's expected terminal value, using the resource's discount rate, divided by (ii) the product of the resource's Qualified Capacity (in kilowatts) and 12 months.

The Existing Capacity Resource's net annual expected cash flow for the first Capacity Commitment Period of the resource's remaining economic life is the resource's expected annual net operating profit excluding expected capacity revenues less its expected capital expenditures in the Capacity Commitment Period.

The Existing Capacity Resource's net annual expected cash flow for each of the subsequent Capacity Commitment Periods of the resource's remaining economic life is the resource's expected annual net operating profit less its expected capital expenditures in the Capacity Commitment Period.

Where:

Expected net operating profit, in dollars, is the Lead Market Participant's expected annual profit that might otherwise be avoided or not accrued if the resource were not subject to the obligations of a listed capacity resource during the Capacity Commitment Period. Expected labor, maintenance, taxes, insurance, administrative and other normal expenses that can be avoided or not incurred if the resource is retired or permanently de-listed may be included. Service of debt is not an avoidable cost and may not be included.

Expected capacity revenues, in dollars, are the forecasted annual expected capacity revenues based on the Lead Market Participant's forecasted expected capacity prices for each of the subsequent Capacity Commitment Periods of the resource's remaining economic life. The Lead Market Participant shall provide the Internal Market Monitor with documentation supporting the forecasted expected capacity prices. The supporting documentation must include a detailed description and sources of the Lead Market Participant's assumptions about expected resource additions, resource retirements, estimated Installed Capacity Requirements, estimated Local Sourcing Requirements, expected market conditions, and any other assumptions used to develop the forecasted expected capacity price in each Capacity Commitment Period.

If the Internal Market Monitor determines the Lead Market Participant has not provided adequate supporting documentation for the forecasted expected capacity prices, the Internal Market Monitor will replace the Lead Market Participant's forecasted expected capacity prices with the Internal Market Monitor's estimate thereof in each of the subsequent Capacity Commitment Periods of the resource's remaining economic life.

Expected capital expenditures, in dollars, are the Lead Market Participant's expected capital investments that might otherwise be avoided or not incurred if the resource were not subject to the obligations of a listed capacity resource during the Capacity Commitment Periods.

Expected terminal value, in dollars, for resources with five years or less of remaining economic life, is the Lead Market Participant's expected revenue less expected costs associated with retiring or permanently de-listing the resource. For resources with more than five years of remaining economic life, the expected terminal value in the fifth year of the evaluation period is the Lead Market Participant's expected revenue less expected costs associated with retiring or permanently de-listing the resource at the end of the resource's economic life plus the net present value of the Existing Capacity Resource's net annual expected cash flows from the sixth year of the evaluation period through the end of the resource's remaining economic life, using the resource's discount rate.

Discount rate is a value reflecting the Lead Market Participant's weighted average cost of capital for the Existing Capacity Resource adjusted to reflect the risk to cash flows calculated pursuant to the net present value of expected cash flows analysis in this Section III.13.1.2.3.2.1.2.B.

The Lead Market Participant shall provide the Internal Market Monitor with documentation supporting the weighted average cost of capital for the Existing Capacity Resource adjusted for risk.

The supporting documentation must include a detailed description and sources of the Lead Market Participant's assumptions associated with the cost of capital, risks and any other assumptions used to develop the weighted average cost of capital for the Existing Capacity Resource adjusted for risk.

If the Internal Market Monitor determines the Lead Market Participant has not provided adequate supporting documentation for the weighted average cost of capital for the Existing Capacity Resource adjusted for risk, the Lead Market Participant has included risks not associated with cash flows calculated pursuant to the net present value of expected cash flows analysis in this Section III.13.1.2.3.2.1.2.B or the Lead Market Participant has submitted costs, revenues, capital expenditures or prices that are not reflective of expected values, the Internal Market Monitor will replace the Lead Market Participant's discount rate with a value determined by the Internal Market Monitor.

III.13.1.2.3.2.1.2.C Permanent De-List Bid and Retirement De-List Bid Calculation of Remaining Economic Life.

The Internal Market Monitor shall calculate the Existing Capacity Resource's remaining economic life, using evaluation periods ranging from one to five years. For each evaluation period, the Internal Market Monitor will calculate the net present value of (a) the annual expected net operating profit minus annual expected capital expenditures assuming the Capacity Clearing Price for the first year is equal to the Forward Capacity Auction Starting Price and (b) the expected terminal value of the resource at the end of the given evaluation period. The economic life is the maximum evaluation period in which a resource's net present value is non-negative. However, effective April 9, 2020, beginning with the sixteenth Forward Capacity Auction, the economic life is the evaluation period in which a resource's net present value is maximized.

III.13.1.2.3.2.1.3. Expected Capacity Performance Payments.

The Lead Market Participant for an Existing Capacity Resource that submits a Static De-List Bid or an Export Bid, Permanent De-List Bid, or Retirement De-List Bid at or above the Dynamic De-List Bid Threshold that is to be reviewed by the Internal Market Monitor shall also provide documentation separately detailing the expected Capacity Performance Payments for the resource. This documentation must include expectations regarding the applicable Capacity Balancing Ratio, the number of hours of reserve deficiency, and the resource's performance during reserve deficiencies.

III.13.1.2.3.2.1.4. Risk Premium.

The Lead Market Participant for an Existing Capacity Resource that submits a Static De-List Bid, or an Export Bid at or above the Dynamic De-List Bid Threshold that is to be reviewed by the Internal Market Monitor shall also provide documentation separately detailing any risk premium included in the bid. This documentation should address all components of physical and financial risk reflected in the bid, including, for example, catastrophic events, a higher than expected amount of reserve deficiencies, and performing scheduled maintenance during reserve deficiencies. Any risk that can be quantified and analytically supported and that is not already reflected in the formula for net going forward costs described in Section III.13.1.2.3.2.1.2.A may be included in this risk premium component. In support of the resource's risk premium, the Lead Market Participant may also submit an affidavit from a corporate officer attesting that the risk premium submitted is the minimum necessary to ensure that the overall level of risk associated with the resource's participation in the Forward Capacity Market is consistent with the participant's corporate risk management practices.

III.13.1.2.3.2.1.5. Opportunity Costs.

To the extent that an Existing Capacity Resource submitting a Static De-List Bid or an Export Bid, Permanent De-List Bid or Retirement De-List Bid at or above the Dynamic De-List Bid Threshold has additional opportunity costs that are not reflected in the net going forward costs, net present value of expected cash flows, expected Capacity Performance Payments, discount rate, or risk premium components of the bid, the Lead Market Participant must include in the Existing Capacity Qualification Package evidence supporting such costs. Opportunity costs associated with major repairs necessary to restore decreases in capacity as described in Section III.13.1.2.2.4, capital projects required to operate the plant as a capacity resource or other uses of the resource shall be considered, provided such costs are substantiated by evidence of a repair plan, documented business plan and fundamental market analysis, or other independent and transparent trading index or indices as applicable. Substantiation of opportunity costs relying on sales in reconfiguration auctions or risk aversion premiums shall not be considered sufficient justification.

III.13.1.2.3.2.2. [Reserved.]

III.13.1.2.3.2.3. Administrative Export De-List Bids.

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

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

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

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

III.13.1.2.3.2.5. Static De-List Bid Incremental Capital Expenditure Recovery Schedule.

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

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

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

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

Where:

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

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

- III.13.1.2.4. Retirement Determination Notification for Existing Capacity and

 Qualification Determination Notification for Existing Capacity; Right to

 Increase Retirement De-List Bid or Permanent De-List Bid up to IMM
 determined substitution auction test price.
- (a) No later than five Business Days before the Existing Capacity Qualification Deadline, the ISO shall send notification to the Lead Market Participant that submitted each Permanent De-List Bid, Retirement De-List Bid and substitution auction test price concerning the result of the Internal Market Monitor's review conducted pursuant to Section III.13.1.2.3.2 and Section III.13.2.8.3.1A. This retirement determination notification shall not include the results of the reliability review pursuant to Sections III.13.1.2.3.1.5.1 or III.13.2.5.2.5. For auctions associated with a Capacity Commitment Period that begins on or after June 1, 2023, within five Business Days of the issuance of the retirement determination notification, a Lead Market Participant that submitted a Retirement De-List Bid or a Permanent De-List Bid and a substitution auction demand bid for the resource associated with the de-list bid, may make the following adjustments:
- (i) for a Retirement De-List Bid, if, but for the limits in Section III.13.1.2.3.2.1.1.2 on adjusting a Market Participant-submitted Retirement De-List Bid, the Internal Market Monitor would have calculated a Retirement De-List Bid price that is higher than the Market Participant-submitted de-list bid price and the Market Participant-submitted de-list bid is less than the Internal Market Monitor-determined substitution auction test price multiplied by 0.9, the Market Participant may increase the de-list bid price up to the minimum of (x) the Internal Market Monitor-determined substitution auction test price multiplied by 0.9 and (y) the higher Retirement De-List Bid price that the Internal Market Monitor would have calculated; (ii) for a Permanent De-List Bid, if, but for the limits in Section III.13.1.2.3.2.1.1.2 on adjusting a Market Participant-submitted Permanent De-List Bid, the Internal Market Monitor would have calculated a Permanent De-List Bid price that is higher than the Market Participant-submitted de-list bid price and the Market Participant-submitted de-list bid is less than the Internal Market Monitor-determined substitution auction test price multiplied by 0.9, the Market Participant may increase the de-list bid price up to the minimum of (x) the Internal Market Monitor-determined substitution auction test price multiplied by 0.9 and (y) the higher Permanent De-List Bid price that the Internal Market Monitor would have calculated.

(b) No later than 127 days before the Forward Capacity Auction, the ISO shall send notification to the Lead Market Participant that submitted each Static De-List Bid and Export Bid concerning the result of the Internal Market Monitor's de-list bid review conducted pursuant to Section III.13.1.2.3.2. The qualification determination shall not include the results of the reliability review pursuant to Section III.13.2.5.2.5.

III.13.1.2.4.1. Participant-Elected Retirement or Conditional Treatment.

No later than five Business Days after the issuance by the ISO of the retirement determination notification described in Section III.13.1.2.4(a), a Lead Market Participant that submitted a Permanent De-List Bid or Retirement De-List Bid may make an election pursuant to Section III.13.1.2.4.1(a) or Section III.13.1.2.4.1(b). If the Lead Market Participant does not make an election pursuant to Section III.13.1.2.4.1(a) or Section III.13.1.2.4.1(b), the prices provided by the Internal Market Monitor in the retirement determination notifications shall be the finalized prices used in the Forward Capacity Auction as described in Section III.13.2.3.2(b) (unless otherwise directed by the Commission).

- (a) A Lead Market Participant may elect to retire the resource, or portion thereof, for which it has submitted a Permanent De-List Bid or Retirement De-List Bid. The capacity associated with a Permanent De-List Bid or Retirement De-List Bid subject to this election will not be subject to reliability review and will be retired pursuant to Section III.13.2.5.2.5.3(a); provided, however, that when making the retirement election pursuant to this Section III.13.1.2.4.1(a) the Lead Market Participant may opt to have the resource reviewed for reliability pursuant to Section III.13.1.2.3.1.5.1, in which case the Lead Market Participant may have the opportunity (but will not be obligated) to provide capacity from the resource if the ISO determines that the resource is needed for reliability reasons, as described in Section III.13.1.2.3.1.5.1(d).
- (b) A Lead Market Participant may elect conditional treatment for the Permanent De-List Bid or Retirement De-List Bid. The capacity associated with a Permanent De-List Bid or Retirement De-List Bid subject to this election will be treated as described in Section III.13.2.3.2(b)(ii), Section III.13.2.5.2.1, and Section III.13.2.5.2.5.3; provided, however, that in making this election the Lead Market Participant may opt to have the resource reviewed for reliability pursuant to Section III.13.1.2.3.1.5.1, in which case the Lead Market Participant may have the opportunity (but will not be obligated) to provide capacity from the resource if the ISO determines that the resource is needed for reliability reasons, as described in Section III.13.1.2.3.1.5.1(d).

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

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

III.13.1.3. Import Capacity.

The qualification requirements for import capacity shall depend on whether the import capacity is an Existing Import Capacity Resource or a New Import Capacity Resource. Both Existing Import Capacity Resources and New Import Capacity Resources clearing in the Forward Capacity Auction must be backed by one or more External Resources or by an external Control Area throughout the relevant Capacity Commitment Period. An external demand resource may not be an Existing Import Capacity Resource or a New Import Capacity Resource. External nodes shall be established and mapped to Capacity Zones pursuant to the provisions in Attachment K to Section II of the Transmission, Markets and Services Tariff.

An Elective Transmission Upgrade with an Interconnection Request for Capacity Network Import Interconnection Service under Schedule 25 of Section II of the Transmission, Markets and Services Tariff shall be included in the FCM (1) after it has established a contractual association with an Import Capacity Resource and that Import Capacity Resource has met the Forward Capacity Market qualification requirements or (2) after it has met the requirements of an Elective Transmission Upgrade with Long

Lead Time Facility treatment pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff. An external node for such an Elective Transmission Upgrade will be modeled for participation in the Forward Capacity Market after the Import Capacity Resource meets the requirements to participate in the FCA. The Qualified Capacity of an Import Capacity Resource associated with an Elective Transmission Upgrade shall not exceed the Capacity Network Import Interconnection Service Interconnection Request. In order for an Elective Transmission Upgrade to maintain its Capacity Network Import Interconnection Service, an associated Import Capacity Resource must meet the Forward Capacity Market qualification requirements and offer into each Forward Capacity Auction. Otherwise, the Capacity Network Import Interconnection Service will revert to Network Import Interconnection Service for the portion of the Capacity Network Import Interconnection Service for which no Import Capacity Resource is offered into the Forward Capacity Auction and the Elective Transmission Upgrade's Interconnection Agreement will be revised. The provisions in Sections III.13.1.3.5.4, permitting a Capacity Commitment Period Election, and in Section III.13.1.3.5.8, permitting a rationing election, shall apply to a New Import Capacity Resource associated with an Elective Transmission Upgrade seeking to reestablish Capacity Network Import Interconnection Service if the threshold to be treated as a new resource in Section III.13.1.1.1.4 is met. If the threshold to be treated as a new increment in Section III.13.1.1.1.3 is met, only the increment will be eligible for the provisions in Sections III.13.1.3.5.4, permitting a Capacity Commitment Period Election, and in Section III.13.1.3.5.8, permitting a rationing election.

III.13.1.3.1. Definition of Existing Import Capacity Resource.

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

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

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

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

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

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

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

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

a New Import Capacity Resource.

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

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

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

III.13.1.3.3.A Qualification Process for Existing Import Capacity Resources that are not associated with an Elective Transmission Upgrade with Capacity Network Import Interconnection Service.

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

- (a) The Qualified Capacity shall be the lesser of the multi-year contract values as documented in the new resource qualification determination notification and the capacity clearing in the Forward Capacity Auction to which the new resource qualification determination notification applied.
- (b) The rationing election described in Section III.13.1.2.3.1 shall not apply.
- qualify to receive the treatment described in Section III.13.2.7.3A for the duration of the contracts as listed. For each Forward Capacity Auction after the first Forward Capacity Auction, in order for an Existing Import Capacity Resource associated with a contract listed below to qualify for the treatment described in Section III.13.2.7.3A, no later than 10 Business Days prior to the Existing Capacity Retirement Deadline, the Market Participant submitting the Existing Import Capacity Resource must also submit to the ISO documentation verifying that the contract will remain in effect throughout the Capacity Commitment Period and that it has not been amended. For the first Forward Capacity Auction, Existing Import Capacity Resources associated with contracts listed in the table below are qualified to receive the treatment described in Section III.13.2.7.3A.

Contract Description

MW

Contract End Date

NYPA: NY — NE: CMEEC	13.2	8/31/2025
NYPA: NY — NE: MMWEC	53.3	8/31/2025
NYPA: NY — NE: Pascoag	2.3	8/31/2025
NYPA: NY—NE: VELCO	15.3	8/31/2025
	84.1	
VJO: Highgate — NE	Up to 225	10/31/2016
VJO: Highgate — NE (extension)	Up to 6	October 2020
(beginning 11/01/2016)		
VJO: Phase I/II — NE	Up to 110	10/31/2016

In addition to the review described in Section III.13.1.2.3.2, the Internal Market Monitor shall review each bid from Existing Import Capacity Resources. A bid from an Existing Import Capacity Resource shall be rejected if the Internal Market Monitor determines that the bid may be an attempt to manipulate the Forward Capacity Auction, and the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)).

III.13.1.3.3.B. Qualification Process for Existing Import Capacity Resources that are associated with an Elective Transmission Upgrade with Capacity Import Interconnection Service.

Existing Import Capacity Resources associated with an Elective Transmission Upgrade with Capacity Import Interconnection Service pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff shall be subject to the same qualification process as Existing Generating Capacity Resources as described in Section III.13.1.2.3, except the Qualified Capacity shall be the lesser of the multi-year contract values as documented in the new resource qualification determination notification and the capacity clearing in the Forward Capacity Auction to which the new resource qualification determination notification applied.

III.13.1.3.4. Definition of New Import Capacity Resource.

Capacity not associated with a multi-year contract entered into before the New Capacity Qualification

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

Area for the whole Capacity Commitment Period, but that meets the requirements of Section

III.13.1.3.5.1, shall participate in the Forward Capacity Auction as a New Import Capacity Resource. For capacity associated with a multi-year contract entered into before the New Capacity Qualification

Deadline to provide capacity in the New England Control Area from outside the New England Control Area for a period including the whole Capacity Commitment Period, or capacity from an External Resource that is owned or directly controlled by the Lead Market Participant and which is committed for at least two whole consecutive Capacity Commitment Periods by the Lead Market Participant in the New Capacity Qualification Package, if the import capacity has not cleared in a previous Forward Capacity Auction, then the import capacity shall participate in the Forward Capacity Auction as a New Import Capacity Resource.

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

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

III.13.1.3.5.1. Documentation of Import.

For each New Import Capacity Resource, the Project Sponsor submitting the import capacity (a) must also submit: (i) documentation of a one-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the entire Capacity Commitment Period, including documentation of the MW value of the contract; (ii) documentation of a multi-year contract entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the contract period including the entire Capacity Commitment Period, including documentation of the MW value of the contract; (iii) proof of ownership or direct control over one or more External Resources that will be used to back the New Import Capacity Resource during the Capacity Commitment Period, including information to establish the summer and winter ratings of the resource(s) backing the import; or (iv) documentation for system-backed import capacity that the import capacity will be supported by the Control Area and that the energy associated with that system-backed import capacity will be afforded the same curtailment priority as that Control Area's native load. For each New Import Capacity Resource, the Project Sponsor must specify the interface over which the capacity will be imported. The Project Sponsor must indicate whether the import is associated with any investment in transmission that increases New England's import capability or is associated with an Elective Transmission Upgrade with an Interconnection Request for Capacity Network Import Interconnection Service pursuant to Schedule 25 of Section II of the Transmission, Markets and Services

Tariff that has not yet achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff. The Project Sponsor must submit a contract confirming its association with the Elective Transmission Upgrade Interconnection Customer and the ISO will confirm that relationship. If the import will be backed by a single new External Resource, the Project Sponsor submitting the import capacity must also submit a general description of the project's equipment configuration, including a description of the resource type (such as those listed in the table in Section III.A.21.1 or some other type).

(b) To qualify for Capacity Commitment Periods prior to the Capacity Commitment Period associated with the Forward Capacity Auction for which the import capacity is qualifying, the Project Sponsor must submit documentation of one or more one-year contracts for each prior Capacity Commitment Period, entered into before the New Capacity Qualification Deadline to provide capacity in the New England Control Area from outside of the New England Control Area for the entire Capacity Commitment Period, including documentation of the MW value of the contract(s); the Project Sponsor must also satisfy the relevant requirements of Sections III.13.1.3.5.1(a), III.13.1.3.5.2, III.13.1.9, and III.13.3.1.1.

III.13.1.3.5.2. Import Backed by Existing External Resources.

If the New Import Capacity Resource will be backed by one or more External Resources existing at the time of the Forward Capacity Auction and the capacity will be imported over an interface that has achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Project Sponsor shall instead submit a description of how the New Import Capacity Resource will meet its Capacity Supply Obligation in the Capacity Commitment Period(s) for which it seeks to qualify.

If the New Import Capacity Resource will be backed by one or more External Resources existing at the time of the Forward Capacity Auction and the capacity will be imported over an interface that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall apply in addition to the requirement that the Project Sponsor submit a description of how the New Import Capacity Resource will meet its Capacity Supply Obligation in the Capacity Commitment Period(s) for which it seeks to qualify.

The description must indicate specifically which External Resources will back the New Import Capacity Resource during the Capacity Commitment Period, and if those External Resources are not owned or controlled directly by the Project Sponsor, the description must include a commitment that the External Resources will have sufficient capacity that is not obligated outside the New England Control Area to fully satisfy the New Import Capacity Resource's potential Capacity Supply Obligation during the Capacity Commitment Period and demonstrate how that commitment will be met.

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

If the New Import Capacity Resource will be backed by an external Control Area and the capacity will be imported over an interface that has achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall not apply, and the Project Sponsor shall instead submit system load and capacity projections for the external Control Area showing sufficient excess capacity during the Capacity Commitment Period to back the New Import Capacity Resource.

If the New Import Capacity Resource will be backed by an external Control Area and the capacity will be imported over an Elective Transmission Upgrade and the capacity will be imported over an interface that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff, the provisions regarding site control (Section III.13.1.1.2.2.1) and critical path schedule (Section III.13.1.1.2.2.2) shall apply in addition to the requirement that the Project Sponsor submit system load and capacity projections for the external Control Area showing sufficient excess capacity during the Capacity Commitment Period to back the New Import Capacity Resource for the length of the multi-year contract.

III.13.1.3.5.3.1. Imports Crossing Intervening Control Areas.

The preceding rules define requirements associated with the import of capacity from a Control Area, or resources located in a Control Area, directly adjacent to the New England Control Area. Imports of capacity from a Control Area or resources located in a Control Area where such import crosses an intervening Control Area or Control Areas shall comply with the following additional requirements: (1) For imports crossing a single intervening Control Area, the Project Sponsor entering the import contract shall demonstrate, as detailed in the ISO New England Manuals, that the remote Control Area will afford

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

III.13.1.3.5.4. Capacity Commitment Period Election.

The provisions regarding Capacity Commitment Period election (Section III.13.1.1.2.2.4) shall only apply to a New Import Capacity Resource associated with an Elective Transmission Upgrade with a Capacity Network Import Interconnection Service Interconnection Request. All other New Import Capacity Resources clearing in the Forward Capacity Auction shall have a Capacity Supply Obligation and shall receive payments only for the one-year Capacity Commitment Period associated with that Forward Capacity Auction.

III.13.1.3.5.5. Initial Interconnection Analysis.

The provisions regarding initial interconnection analysis (Section III.13.1.1.2.3) shall not apply unless the capacity will be imported over an Elective Transmission Upgrade pursuing Capacity Network Import Interconnection Service pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff.

III.13.1.3.5.5.A. Cost Information.

The offer information described in Section III.13.1.1.2.2.3 and Section III.A.21.2 may be submitted in the form of a curve (up to five price-quantity pairs) associated with a specific New Import Capacity Resource. The curve may in no case increase the quantity offered as the price decreases. Each price is subject to review by the Internal Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that Section.

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

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

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

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

No later than seven days after the issuance by the ISO of the qualification determination notification described in Section III.13.1.1.2.8, a Lead Market Participant with a New Import Capacity Resource (other than a New Import Capacity Resource that is (i) backed by a single new External Resource and associated with an investment in transmission that increases New England's import capability, or (ii) associated with an Elective Transmission Upgrade) that submitted a request to submit offers in the Forward Capacity Auction at prices that are below the relevant Offer Review Trigger Price as described in Sections III.13.1.1.2.2.3 and III.13.1.3.5 may: (a) lower the requested offer price of any price-quantity pair submitted to the ISO pursuant to Section III.13.1.1.2.2.3, provided that the revised price is greater than or equal to the Dynamic De-List Bid Threshold, or (b) withdraw any price-quantity pair of a requested offer price.

III.13.1.3.5.8. Rationing Election.

New Import Capacity Resources are subject to rationing except New Import Capacity Resource associated with an Elective Transmission Upgrade with a Capacity Network Import Interconnection Service Interconnection Request, which are eligible for the rationing election described in Section III.13.1.1.2.2.3(b).

III.13.1.4. Demand Capacity Resources.

To participate in a Forward Capacity Auction as a Demand Capacity Resource, a resource must meet the requirements of this Section III.13.1.4. Each Demand Capacity Resource shall be a minimum of 100 kW. An Active Demand Capacity Resource comprises one or more Demand Response Resources located in a single Dispatch Zone. An On-Peak Demand Resource or Seasonal Peak Demand Resource comprises one or more Assets located in a single Load Zone. An On-Peak Demand Resource or Seasonal Peak Demand Resource may consist of Load Management measures, Distributed Generation measures, or a combination thereof, or may consist solely of Energy Efficiency measures. A Demand Capacity Resource may include an end-use customer facility with a Net Supply Capability of 5 MW or more only if the facility's Net Supply Capability does not exceed its Maximum Facility Load. Demand Capacity Resources must comply with all applicable federal, state, and local regulatory, siting, and tariff requirements, including interconnection tariff requirements related to siting, interconnection, and operation of the Demand Capacity Resource. Demand Capacity Resources are not permitted to submit import or export bids or Administrative Export De-List Bids.

III.13.1.4.1. Definition of New Demand Capacity Resource.

A New Demand Capacity Resource is an Active Demand Capacity Resource that has not cleared in a previous Forward Capacity Auction, and On-Peak Demand Resource consisting of measures that have not been in service prior to the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction, or a Seasonal Peak Demand Resource consisting of measures that have not been in service prior to the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction. A Demand Capacity Resource that has previously been defined as an Existing Demand Capacity Resource shall be considered a New Demand Capacity Resource if it meets one of the conditions listed in Section III.13.1.1.1.2.

III.13.1.4.1.1. Qualification Process for New Demand Capacity Resources.

For Forward Capacity Auctions a New Demand Capacity Resource shall have a summer Qualified Capacity and winter Qualified Capacity based on the resource's estimated demand reduction value as

submitted and reviewed pursuant to this Section III.13.1.4. The FCA Qualified Capacity for a New Demand Capacity Resource shall be the lesser of the resource's summer Qualified Capacity and winter Qualified Capacity, as adjusted to account for applicable offers composed of separate resources.

- (a) For a resource to qualify as a New Demand Capacity Resource, the resource's Project Sponsor must make two separate submissions to the ISO: First, the Project Sponsor must submit estimated demand reduction values and supporting information in the New Demand Capacity Resource Show of Interest Form as described in Section III.13.1.4.1.1.1. Second, the Project Sponsor must submit a New Demand Capacity Resource Qualification Package as described in Section III.13.1.4.1.1.2.
- (b) For a resource to qualify as a New Demand Capacity Resource that is an On-Peak Demand Resource or a Seasonal Peak Demand Resource, the Project Sponsor must in addition submit, as part of the New Demand Capacity Resource Qualification Package, a Measurement and Verification Plan providing the documentation, analysis, studies and methodologies used to support the estimates described in this Section III.13.1.4.1.1, which shall be reviewed by the ISO to ensure consistency with the measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.1.1.1. New Demand Capacity Resource Show of Interest Form.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Capacity Resource, the Project Sponsor must submit to the ISO a New Demand Capacity Resource Show of Interest Form as described in this Section III.13.1.4.1.1.1 during the New Capacity Show of Interest Submission Window, as described in Section III.13.1.10. A New Demand Capacity Resource Show of Interest Form for a resource composed of Energy Efficiency measures must represent a resource with a new and unique resource identification number. The ISO may waive the submission of any information not required for evaluation of a project.

A completed New Demand Capacity Resource Show of Interest Form shall include, but is not limited to, the following information: project name; Load Zone within which the Demand Capacity Resource will be located; the Dispatch Zone within which an Active Demand Capacity Resource will be located; estimated summer and winter demand reduction values (MW) per measure and/or per customer facility (measured at the customer meter and not including losses); estimated total summer and winter demand reduction value of the Demand Capacity Resource (for an Active Demand Capacity Resource, this estimate must be

consistent with the baseline calculation methodology in Section III.8.2); supporting documentation (e.g., engineering estimates or documentation of verified savings from comparable projects) to substantiate the reasonableness of the estimated demand reduction values; Demand Capacity Resource type (Active Demand Capacity Resource, On-Peak Demand Resource, or Seasonal Peak Demand Resource); brief Demand Capacity Resource project description including measure type (i.e., Energy Efficiency, Load Management, and/or Distributed Generation); types of facilities at which the measures will be implemented; customer classes and end-uses served; the date by which the Project Sponsor expects to be ready to demonstrate to the ISO that the Demand Capacity Resource described in the Project Sponsor's New Demand Capacity Resource Qualification Package has achieved its full demand reduction value; ISO Market Participant status and ISO customer identification (if applicable); status under Schedules 22 or 23 of the Transmission, Markets and Services Tariff (if applicable); project/technical and credit/financial contacts; for individual Distributed Generation projects and Demand Capacity Resource projects from a single facility with a demand reduction value equal to or greater than 5 MW, the Pnode and service address at which the end-use facility is located; capability and experience of the Project Sponsor.

III.13.1.4.1.1.2. New Demand Capacity Resource Qualification Package.

For each resource that a Project Sponsor seeks to offer in the Forward Capacity Auction as a New Demand Capacity Resource, the Project Sponsor must submit a New Demand Capacity Resource Qualification Package no later than the New Capacity Qualification Deadline. The New Demand Capacity Resource Qualification Package shall conform to the requirements of this Section III.13.1.4.1.1.2. The ISO may waive the submission of any information not required for evaluation of a project.

III.13.1.4.1.1.2.1. Source of Funding.

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

III.13.1.4.1.1.2.2. Measurement and Verification Plan.

For On-Peak Demand Resources and Seasonal Peak Demand Resources, the Project Sponsor must provide in the New Demand Capacity Resource Qualification Package a Measurement and Verification

Plan that complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.1.1.2.3. Customer Acquisition Plan.

- (a) A Project Sponsor with more than a single customer must include in the New Demand Capacity Resource Qualification Package a description of its plan to acquire customers that includes, but is not limited to, the following information: a description of proposed customer market; the estimated size of target market and supporting documentation; a marketing plan with supporting documentation describing the manner in which customers will be recruited; and evidence supporting the viability of the marketing plan.
- (b) A Project Sponsor for a New Demand Capacity Resource that includes one or more end-use customer facilities with behind-the-meter generation must include in the New Demand Capacity Resource Qualification Package information demonstrating that each facility's Net Supply Capability will be less than 5 MW or less than or equal to the facility's Maximum Facility Load.

III.13.1.4.1.1.2.4. Critical Path Schedule for a Demand Capacity Resource with a Demand Reduction Value of at Least 5 MW at a Single Retail Delivery Point.

The Project Sponsor of a Demand Capacity Resource with a demand reduction value of at least 5 MW at a single Retail Delivery Point shall provide in the New Demand Capacity Resource Qualification Package a critical path schedule as set forth in Section III.13.1.1.2.2.2.

III.13.1.4.1.1.2.5. Critical Path Schedule for a Demand Capacity Resource with All Retail Delivery Points Having a Demand Reduction Value of Less Than 5 MW.

The Project Sponsor of a Demand Capacity Resource with all Retail Delivery Points having a demand reduction value of less than 5 MW shall provide in the New Demand Capacity Resource Qualification Package a critical path schedule comprised of a delivery schedule of the share of total offered demand reduction value achieved as of target dates, as follows: (i) the cumulative percentage of total demand reduction value achieved on target date 1 occurring five weeks prior to the first annual Forward Capacity Auction after the Forward Capacity Auction in which the Project Sponsor's capacity award was made; (ii) the cumulative percentage of total demand reduction value achieved on target date 2 occurring five weeks prior to the second annual Forward Capacity Auction after the Forward Capacity Auction in which the Project Sponsor's capacity award was made; and (iii) target date 3 which is the date by which the Project

Sponsor expects to be ready to demonstrate to the ISO that the Demand Capacity Resource described in the Project Sponsor's New Demand Capacity Resource Qualification Package has achieved its full demand reduction value, which must be on or before the first day of the relevant Capacity Commitment Period and by which date 100% of total demand reduction value must be complete.

III.13.1.4.1.1.2.6. [Reserved.]

III.13.1.4.1.1.2.7. Capacity Commitment Period Election.

In the New Demand Capacity Resource Qualification Package, the Project Sponsor must specify whether, if its New Demand Capacity Resource offer clears in the Forward Capacity Auction, the associated Capacity Supply Obligation and Capacity Clearing Price (indexed for inflation) shall continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, for up to six additional and consecutive Capacity Commitment Periods, in whole Capacity Commitment Period increments only. If no such election is made in the New Demand Capacity Resource Qualification Package, the Capacity Supply Obligation and Capacity Clearing Price associated with the New Demand Capacity Resource offer shall apply only for the Capacity Commitment Period associated with the Forward Capacity Auction in which the New Demand Capacity Resource offer clears. If the Project Sponsor elects to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which the offer clears, then the Project Sponsor may not change the Demand Capacity Resource type as long as that Capacity Supply Obligation and Capacity Clearing Price continue to apply. If an offer from a New Demand Capacity Resource clears in the Forward Capacity Auction, the capacity associated with the resulting Capacity Supply Obligation may not be subject to any type of de-list or export bid in subsequent Forward Capacity Auctions for Capacity Commitment Periods for which the Project Sponsor elected to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply pursuant to this Section III.13.1.4.1.1.2.7.

III.13.1.4.1.1.2.8. Offer Information From New Demand Capacity Resources.

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

Market Monitor pursuant to Section III.A.21.2 and must include the additional documentation described in that section.

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

III.13.1.4.1.1.3. Initial Analysis for Active Demand Capacity Resources.

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

III.13.1.4.1.1.4. Consistency of the New Demand Capacity Resource Qualification Package and New Demand Capacity Resource Show of Interest Form.

The ISO shall review the Project Sponsor's New Demand Capacity Resource Qualification Package for consistency with its New Demand Capacity Resource Show of Interest Form. The New Demand Capacity Resource Qualification Package may not contain material changes relative to the New Demand Capacity Resource Show of Interest Form. A material change may include, but is not limited to the following: (i) a change in the designation of the Demand Capacity Resource type; (ii) a change in the Project Sponsor, subject to review by the ISO of the capability and experience of the new Project Sponsor; (iii) a change in the Load Zone within which the project is located, and a change in the Dispatch Zone within which the Active Demand Capacity Resource is located; (iv) a change in the total summer or winter demand reduction value of the project by more than 30 percent; (v) a change in the general type of

measure being implemented (e.g., Energy Efficiency, Load Management, Distributed Generation); or (vi) a misrepresentation of the interconnection status of a Distributed Generation project.

III.13.1.4.1.1.5. Evaluation of New Demand Capacity Resource Qualification Materials.

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

- (a) whether the information submitted by New Demand Capacity Resources is accurate and contains all of the elements required by this Section III.13.1.4;
- (b) whether the critical path schedule submitted by New Demand Capacity Resources includes all necessary elements and is sufficiently developed;
- (c) whether the milestones in the critical path schedule submitted by New Demand Capacity Resources are reasonable and likely to be met;
- (d) whether, in the case of a resource previously counted as a capacity resource, the requirements for treatment as a New Demand Capacity Resource are satisfied; and
- (e) whether, in the case of a New Demand Capacity Resource that is an On-Peak Demand Resource or Seasonal Peak Demand Resource, the Measurement and Verification Plan complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.1.1.6. Qualification Determination Notification for New Demand Capacity Resources.

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

- (a) For a New Demand Capacity Resource accepted for participation in the Forward Capacity Auction, the notification will specify the Demand Capacity Resource type and the Demand Capacity Resource's summer and winter Qualified Capacity, which shall be the ISO-determined summer and winter demand reduction value increased by average avoided peak transmission and distribution losses (that is, eight percent).
- (b) For a New Demand Capacity Resource not accepted for participation in the Forward Capacity Auction, the notification will provide an explanation as to why the resource did not meet the requirements set forth in this Section III.13.1.4 and was not accepted.

III.13.1.4.2. Definition of Existing Demand Capacity Resources.

Demand Capacity Resources that previously have been in service and registered with the ISO, and which are not otherwise New Demand Capacity Resources, shall be Existing Demand Capacity Resources. Existing Demand Capacity Resources shall include and are limited to Demand Capacity Resources that have been in service and registered with the ISO to fulfill a Capacity Supply Obligation created by clearing in a past Forward Capacity Auction before the Existing Capacity Qualification Deadline of the applicable Forward Capacity Auction. Except as specified in this Section III.13.1.4, Existing Demand Capacity Resources shall be subject to the same qualification process as Existing Generating Capacity Resources, as described in Section III.13.1.2.3. Existing Demand Capacity Resources shall be subject to Section III.13.1.2.2.5.2. An On-Peak Demand Resource or Seasonal Peak Demand Resource may not include in its summer or winter demand reduction value an Energy Efficiency measure whose Measure Life will expire before the beginning of the applicable season of the associated Capacity Commitment Period.

III.13.1.4.2.A Qualified Capacity for Existing Demand Capacity Resources.

(a) For Existing Demand Capacity Resources composed of Energy Efficiency measures, the summer (or winter, as applicable) Qualified Capacity shall equal the lesser of: (i) the sum of the summer (or winter, as applicable) demand reduction values of the installed Energy Efficiency measures as of the Existing Capacity Qualification Deadline (excluding any capacity that will retire or permanently de-list, or whose Measure Life will expire, prior to start of the applicable season of the relevant Capacity Commitment Period, and increased by average avoided peak transmission and distribution losses) and any summer (or winter, as applicable) capacity that has cleared in a Forward Capacity Auction and has not yet achieved FCM Commercial Operation (provided that such capacity is being monitored by the ISO

pursuant to the provisions of Section III.13.3, is expected to achieve all its critical path schedule milestones prior to the start of the applicable season of the relevant Capacity Commitment Period, and for which the Lead Market Participant or Project Sponsor has met all relevant financial assurance requirements as described in Section III.13.1.9 and in the ISO New England Financial Assurance Policy) and (ii) the amount of summer (or winter, as applicable) capacity that cleared in a Forward Capacity Auction as a New Demand Capacity Resource.

(b) For Existing Demand Capacity Resources other than those composed of Energy Efficiency measures, the summer and winter Qualified Capacity shall equal the summer and winter demand reduction value, respectively, increased by average avoided peak transmission and distribution losses.

III.13.1.4.2.1. Qualified Capacity Notification for Existing Demand Capacity Resources.

- (a) For each Existing Demand Capacity Resource, the ISO will notify the Resource's Lead Market Participant no later than 15 Business Days before the Existing Capacity Retirement Deadline of: the Demand Capacity Resource type; summer and winter Qualified Capacity; the Load Zone in which the Demand Capacity Resource is located; and, for Active Demand Capacity Resources, the Dispatch Zone in which the resource is located.
- (b) If the Lead Market Participant believes that the ISO's assessment of the Qualified Capacity is inaccurate, the Market Participant must notify the ISO within five Business Days of receipt of the Qualified Capacity notification.
- (c) If a Market Participant with an Existing On-Peak Demand Resource or Existing Seasonal Peak Demand Resource wishes to change its Demand Capacity Resource type, the Market Participant must submit an Updated Measurement and Verification Plan to reflect the change in its resource type. Updated Measurement and Verification Plans must be received by the ISO no later than five Business Days after receipt of the Qualified Capacity notification. Designation of the Demand Capacity Resource type may not be changed during the Capacity Commitment Period.
- (d) A Market Participant with an Existing On-Peak Demand Resource or Existing Seasonal Peak Demand Resource may provide an Updated Measurement and Verification Plan as described in Section III.13.1.4.3.1.2 that complies with the ISO's measurement and verification requirements pursuant to Section III.13.1.4.3 and the ISO New England Manuals. Updated Measurement and Verification Plans

must be received by the ISO no later than five Business Days after receipt of the Qualified Capacity notification.

(e) If an Existing Demand Capacity Resource is not submitting a Static De-List Bid, Permanent De-List Bid, or Retirement De-List Bid for the Forward Capacity Auction, then no further submissions or actions for that resource are necessary, and the resource shall participate in the Forward Capacity Auction as described in Section III.13.2.3.2(c) with Qualified Capacity as indicated in the ISO's notification.

III.13.1.4.2.2. Existing Demand Capacity Resource De-List Bids.

An Existing Demand Capacity Resource may submit a Permanent De-List Bid or Retirement De-List Bid pursuant to the provisions of Section III.13.1.2.3.1.5 no later than the Existing Capacity Retirement Deadline or a Static De-List Bid pursuant to the provisions of Section III.13.1.2.3.1.1 no later than the Existing Capacity Qualification Deadline, provided, however, that no de-list bid shall be used as a mechanism to inappropriately qualify Assets associated with Existing Demand Capacity Resources as New Demand Capacity Resources.

III.13.1.4.3. Measurement and Verification Applicable to On-Peak Demand Resources and Seasonal Peak Demand Resources.

To demonstrate the demand reduction value of an On-Peak Demand Resource or Seasonal Peak Demand Resource, the Project Sponsor or Market Participant of such a resource participating in the Forward Capacity Auction, Capacity Supply Obligation Bilaterals, or reconfiguration auctions shall submit to the ISO the Measurement and Verification Documents in accordance with this Section III.13.1.4.3 and the ISO New England Manuals. The ISO shall review such Measurement and Verification Documents to determine whether they are consistent with the measurement and verification requirements set forth in this Section III.13.1.4.3 and the ISO New England Manuals.

III.13.1.4.3.1. Measurement and Verification Documents.

Measurement and Verification Documents must demonstrate both availability and performance of an On-Peak Demand Resource or Seasonal Peak Demand Resource in reducing demand coincident with Demand Resource On-Peak Hours or Demand Resource Seasonal Peak Hours such that the reported monthly demand reduction value shall achieve at least a ten percent relative precision and an eighty percent confidence interval as described and applied in the ISO New England Manuals and ISO New England Operating Procedures. The Measurement and Verification Documents shall serve as the basis for the

claimed demand reduction value of an On-Peak Demand Resource or Seasonal Peak Demand Resource. The Measurement and Verification Documents shall document the measurement and verification performed to verify the achieved demand reduction value of the On-Peak Demand Resource or Seasonal Peak Demand Resource. The Measurement and Verification Documents shall contain a projection of the On-Peak Demand Resource's or Seasonal Peak Demand Resource's demand reduction value for each month of the Capacity Commitment Period and over the expected Measure Lives associated with the Demand Capacity Resources. An On-Peak Demand Resource's or Seasonal Peak Demand Resource's Measurement and Verification Documents must describe the methodology used to calculate electrical energy load reduction or output during Demand Resource On-Peak Hours, or Demand Resource Seasonal Peak Hours. If an On-Peak Demand Resource or Seasonal Peak Demand Resource includes Distributed Generation, the Measurement and Verification Documents must describe the individual metering or metering protocol used to monitor and verify the output of the Distributed Generation, consistent with the measurement and verification requirements set forth in Market Rule 1 and the ISO New England Manuals.

The Measurement and Verification Documents shall include a Measurement and Verification Plan submitted in the Forward Capacity Auction Qualification, as described in Section III.13.1.4.3 and a monthly Measurement and Verification Summary Report during the Capacity Commitment Period. The monthly Measurement and Verification Summary Reports shall reference the measurement and verification protocols and performance data documented in the Measurement and Verification Plan or the Measurement and Verification Reference Report(s). Such monthly Measurement and Verification Summary Reports will document the Project Sponsor's total demand reduction value from eligible preexisting measures and new measures, and the Project Sponsor's total demand reduction value from both eligible pre-existing measures and new measures, for all measures it had in operation as of the end of the previous month. The monthly Measurement and Verification Summary Reports shall be based on Measurement and Verification Documents determined in accordance with Market Rule 1 and the ISO New England Manuals, and shall be the basis for monthly settlement with Project Sponsors. All Measurement and Verification Documents shall conform to the ISO's specifications with respect to content, format and delivery methodology, and shall be submitted in accordance with the timelines and deadlines set forth in Market Rule 1 and the ISO New England Manuals.

III.13.1.4.3.1.1. Optional Measurement and Verification Reference Reports.

At the option of the Project Sponsor, the Measurement and Verification Documents for an On-Peak Demand Resource or a Seasonal Peak Demand Resource may also include one or more Measurement and Verification Reference Report(s) submitted during the Capacity Commitment Period subject to the schedule in the Measurement and Verification Plan and consistent with the schedule and reporting standards set forth in the ISO New England Manuals. Measurement and Verification Reference Reports shall update the prospective demand reduction value of the On-Peak Demand Resource or Seasonal Peak Demand Resource based on measurement and verification studies performed during the Capacity Commitment Period.

III.13.1.4.3.1.2. Updated Measurement and Verification Documents.

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

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

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

III.13.1.4.3.1.4. Record Requirement of Retail Customers Served.

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

III.13.1.4.3.2. ISO Review of Measurement and Verification Documents.

The ISO shall review the Measurement and Verification Documents and complete such review and identify any necessary modifications in accordance with the Forward Capacity Auction qualification process as described in Section III.13.1 and pursuant to the ISO New England Manuals. In its review of the Measurement and Verification Documents, the ISO may consult with the Project Sponsor or Lead Market Participant to seek clarification, to gather additional necessary information, or to address questions or concerns arising from the materials submitted. At the discretion of the ISO, the ISO may consider revisions or additions to the Measurement and Verification Documents resulting from such consultation; provided, however, that in no case shall the ISO consider revisions or additions to the Measurement and Verification Documents if the ISO believes that such consideration cannot be properly accomplished within the time periods established for the qualification process.

III.13.1.5. Offers Composed of Separate Resources.

Separate resources seeking to participate together in a Forward Capacity Auction shall submit a composite offer form no later than 10 Business Days after the date on which the ISO provides qualification determination notifications, as described in Section III.13.1.1.2.8, Section III.13.1.2.4, and Section III.13.1.4.1.1.6. Offers composed of separate resources may not be modified or withdrawn after the deadline for submission of the composite offer form. Separate resources may together participate in a Forward Capacity Auction as a single resource if the following conditions are met:

- (a) In all months of the summer period (June through September where the summer resource is not a Demand Capacity Resource, April through November where the summer resource is a Demand Capacity Resource) of the Capacity Commitment Period, only one resource may be used to supply the amount of capacity offered during the entire summer period. In all months of the winter period (October through May where the summer resource is not a Demand Capacity Resource, December through March where the summer resource is a Demand Capacity Resource) of the Capacity Commitment Period, multiple resources may be combined to supply the amount of capacity offered, provided that: (i) the resources together meet the amount of the offer in all months of the winter period; and (ii) to combine for a month, that month must be considered a winter month for both the summer resource and the resource combining with that summer resource in that month.
- (b) Each resource that is part of an offer composed of separate resources must qualify in accordance with all of the provisions of this Section III.13.1.5 applicable to that resource type. An offer composed of separate resources participates in the Forward Capacity Auction in accordance with the resource type of the resource providing capacity in the summer period. A resource electing (pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.1.1.2.7) to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its New Capacity Offer clears shall not be eligible to participate in an offer composed of separate resources as the resource providing capacity in the summer period in the Forward Capacity Auction in which the resource is a New Generating Capacity Resource or New Demand Capacity Resource.
- (c) The summer Qualified Capacity of an offer composed of separate resources shall be the summer Qualified Capacity of the single resource that will provide the Capacity Supply Obligation during the summer period. If the summer Qualified Capacity of an offer composed of separate resources is greater than the winter capacity for any month, then the provisions of Section III.13.1.2.2.5.2 shall apply, even where any of the resources comprising the offer composed of separate resources is an Intermittent Power Resource. If the winter capacity of the offer composed of separate resources in any month is higher than the summer Qualified Capacity, then the capacity offered from the winter resources will be reduced prorata to equal the summer Qualified Capacity.
- (d) Offers composed of separate resources are subject to the locational restrictions specified in the following table:

		Location of Summer Resource			
		Import- Constrained Capacity Zone	Rest-of-Pool Capacity Zone	Export- Constrained Capacity Zone	Nested Export- Constrained Capacity Zone
Location of Winter Resource	Import- Constrained Capacity Zone	Eligible (within same Capacity Zone)	Eligible	Eligible	Eligible
	Rest-of-Pool Capacity Zone	Ineligible	Eligible	Eligible	Eligible
	Export- Constrained Capacity Zone	Ineligible	Ineligible	Eligible (within same Capacity Zone)	Eligible (within same Capacity Zone where nested export-constrained Capacity Zone is located)
	Nested Export- Constrained Capacity Zone	Ineligible	Ineligible	Ineligible	Eligible (within same Capacity Zone)

(e) A Renewable Technology Resource may only participate in an offer composed of separate resources if its FCA Qualified Capacity has not been prorated pursuant to Section III.13.1.1.2.10.

III.13.1.5.A. Notification of FCA Qualified Capacity.

No later than five Business Days after the deadline for submission of offers composed of separate resources, the ISO shall notify the Project Sponsor or Lead Market Participant for each New Generating Capacity Resource, New Import Capacity Resource, and New Demand Capacity Resource of the resource's final FCA Qualified Capacity for the Forward Capacity Auction. Such notification will detail the resource's financial assurance requirements in accordance with Section III.13.1.9.

III.13.1.6. Self-Supplied FCA Resources.

Where a Project Sponsor elects to designate all or a portion of a New Generating Capacity Resource or an Existing Generating Capacity Resource as a Self-Supplied FCA Resource, the Project Sponsor must make such designation in writing to the ISO no later than the date by which the Project Sponsor is required to submit the FCM Deposit and, if the Project Sponsor is not also the associated load serving

entity, the Project Sponsor must at that time provide written confirmation from the load serving entity regarding the Self-Supplied FCA Resource designation. A New Import Capacity Resource or Existing Import Capacity Resource may be designated as a Self-Supplied FCA Resource. All Self-Supplied FCA Resources shall be subject to the eligibility and locational requirements in this Section III.13.1.6. If designated as a Self-Supplied FCA Resource and otherwise accepted in the qualification process, the resource will clear in the Forward Capacity Auction as described in Section III.13.2.3.2(c) and, with the exception of demand programs for Self-Supplied FCA Resources, shall offset an equal amount of the load serving entity's Capacity Load Obligation in the Capacity Commitment Period. A load serving entity seeking to self-supply using a Demand Capacity Resource shall realize the benefit through the actual reduction in its annual system coincident peak load, shall not receive credit for a resource and, therefore, is not required to participate in the qualification process described in this Section III.13.1. All designations as a Self-Supplied FCA Resource in the Forward Capacity Auction qualification process are binding.

III.13.1.6.1. Self-Supplied FCA Resource Eligibility.

Where all or a portion of a resource is designated as a Self-Supplied FCA Resource, it shall also maintain its status as a New Generating Capacity Resource, Existing Generating Capacity Resource, New Import Capacity Resource or Existing Import Capacity Resource, and must satisfy the Forward Capacity Auction qualification process requirements set forth in the remainder of Section III.13.1 applicable to that resource type, in addition to the requirements of this Section III.13.1.6. Where an offer composed of separate resources is designated as a Self-Supplied FCA Resource, all of the requirements and deadlines specified in Section III.13.1.5 shall apply to that offer, in addition to the requirements of this Section III.13.1.6. The total quantity of capacity that an load serving entity designates as Self-Supplied FCA Resources may not exceed the load serving entity's projected share of the Installed Capacity Requirement during the Capacity Commitment Period which shall be calculated by determining the load serving entity's most recent percentage share of the Installed Capacity Requirement multiplied by the projected Installed Capacity Requirement for the commitment year. No resource may be designated as a Self-Supplied FCA Resource for more MW than the lesser of that resource's summer Qualified Capacity and winter Qualified Capacity.

III.13.1.6.2. Locational Requirements for Self-Supplied FCA Resources.

In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource for a load in an import-constrained Capacity Zone, the Self-Supplied FCA Resource must be located in the same Capacity

Zone as the associated load, unless the Self-Supplied FCA Resource is a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights. In order to participate in the Forward Capacity Auction as a Self-Supplied FCA Resource in an export-constrained Capacity Zone for a load outside that export-constrained Capacity Zone, the Self-Supplied FCA Resource must be a pool-planned unit or other unit with a special allocation of Capacity Transfer Rights.

III.13.1.7. Internal Market Monitor Review of Offers and Bids.

In addition to the other provisions of this Section III.13.1, the Internal Market Monitor shall have the authority to review in the qualification process each resource's summer and winter Seasonal Claimed Capability if it is significantly lower than historical values, and if the Internal Market Monitor determines that it may be an attempt to exercise physical withholding, the matter will be referred to the Commission in accordance with the protocols set forth in Appendix A to the Commission's Market Monitoring Policy Statement (111 FERC ¶ 61,267 (2005)). Where an entity submits: (i) an offer as a New Generating Capacity Resource, a New Import Capacity Resource or a New Demand Capacity Resource; and (ii) a Static De-List Bid, a Permanent De-List Bid, a Retirement De-List Bid, an Export Bid or an Administrative Export De-List Bid in the same Forward Capacity Auction, the Internal Market Monitor shall take appropriate steps to ensure that the resource bid to de-list, retire or export in the Forward Capacity Auction is not inappropriately replaced by that new capacity in a subsequent reconfiguration auction or Capacity Supply Obligation Bilateral. In its review of any offer or bid pursuant to this Section III.13.1.7, the Internal Market Monitor may consult with the Project Sponsor or Market Participant, as appropriate, to seek clarification, or to address questions or concerns regarding the materials submitted.

III.13.1.8. Publication of Offer and Bid Information.

- (a) Resource name, quantity and Load Zone (or interface, as applicable) in which the resource is located about each Permanent De-list Bid and Retirement De-List Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (b) The quantity and Load Zone (or interface, as applicable) in which the resource is located of each Static De-List Bid will be posted no later than 15 days after the Forward Capacity Auction is conducted.
- (c) Name of submitter, quantity, and interface of Export Bids and Administrative Export Bids shall be published no later than 15 days after the Forward Capacity Auction is conducted.

- (d) Name of submitter, quantity, and interface about offers from New Import Capacity Resources shall be published no later than 15 days after the Forward Capacity Auction is conducted.
- (e) No later than three Business Days after the Existing Capacity Retirement Deadline, the ISO shall post on its website information concerning Permanent De-List Bids and Retirement De-List Bids.
- Administrative Export De-List Bids, as well as the number and type of such de-list bids submitted by each Lead Market Participant, shall be published no later than three Business Days after the ISO issues the qualification determination notifications described in Sections III.13.1.1.2.8, III.13.1.2.4(b), and III.13.1.3.5.7. Authorized Persons of Authorized Commissions will be provided confidential access to full information about posted Static De-list Bids, Permanent De-List Bids, and Retirement De-List Bids upon request pursuant to Section 3.3 of the ISO New England Information Policy.
- (g) No later than five Business Days after the close of the New Capacity Show of Interest Submission Window, the ISO shall post on its website the aggregate quantity of supply offers and demand bids that have been elected to participate in the substitution auction by Capacity Zone (where the zones used are those being studied for inclusion in the associated Forward Capacity Auction pursuant to Section III.12.4).

III.13.1.9. Financial Assurance.

Except as noted in this Section III.13.1.9, all financial assurance requirements associated with Forward Capacity Auctions and annual reconfiguration auctions and other payments and charges resulting from the Forward Capacity Market shall be governed by the ISO New England Financial Assurance Policy.

III.13.1.9.1. Financial Assurance for New Generating Capacity Resources and New Demand Capacity Resources Participating in the Forward Capacity Auction.

In order to participate in any Forward Capacity Auction, New Generating Capacity Resources (including Conditional Qualified New Resources) and New Demand Capacity Resources shall be required to meet the financial assurance requirements as described in the ISO New England Financial Assurance Policy. Timely payment of the FCM Deposit by the Project Sponsor for a New Generating Capacity Resource or New Demand Capacity Resource accepted for participation in the Forward Capacity Auction constitutes a

commitment to offer the full FCA Qualified Capacity of that New Generating Capacity Resource or New Demand Capacity Resource in the Forward Capacity Auction at the Forward Capacity Auction Starting Price. If the FCM Deposit is not received within the timeframe specified in the ISO New England Financial Assurance Policy, the New Generating Capacity Resource or New Demand Capacity Resource shall not be permitted to participate in the Forward Capacity Auction. If capacity offered by the New Generating Capacity Resource or New Demand Capacity Resource clears in the Forward Capacity Auction, financial assurance required prior to the auction pursuant to FAP shall be applied toward the resource's financial assurance obligation, as described in the ISO New England Financial Assurance Policy. If no capacity offered by that New Generating Capacity Resource or New Demand Capacity Resource clears in the Forward Capacity Auction, the financial assurance required prior to the auction pursuant to FAP will be released pursuant to the terms of the ISO New England Financial Assurance Policy.

III.13.1.9.2. Financial Assurance for New Generating Capacity Resources and New Demand Capacity Resources Clearing in a Forward Capacity Auction.

Where a New Generating Capacity Resource's offer or a New Demand Capacity Resource's offer is accepted in a Forward Capacity Auction, that resource must provide financial assurance as described in the ISO New England Financial Assurance Policy.

III.13.1.9.2.1. Failure to Provide Financial Assurance or to Meet Milestone.

If a New Generating Capacity Resource or New Demand Capacity Resource: (i) fails to provide the required financial assurance as described in the ISO New England Financial Assurance Policy or (ii) has its Capacity Supply Obligation terminated by the ISO pursuant to Section III.13.3.4A, it shall lose its Capacity Supply Obligation and its right to any payments associated with that Capacity Supply Obligation, and it shall forfeit any financial assurance provided with respect to that Capacity Supply Obligation.

III.13.1.9.2.2. Release of Financial Assurance.

Once a New Generating Capacity Resource or New Demand Capacity Resource achieves FCM Commercial Operation, its financial assurance obligation shall be released pursuant to the terms of the ISO New England Financial Assurance Policy and it shall have the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy. If a New Generating Capacity Resource or New Demand Capacity Resource is only capable of

delivering less than the amount of capacity that cleared in the Forward Capacity Auction, then the portion of its financial assurance associated with the shortfall shall be forfeited.

III.13.1.9.2.2.1. [Reserved.]

III.13.1.9.2.3. Forfeit of Financial Assurance.

Where any financial assurance is forfeited pursuant to the provisions of Section III.13, there shall be no further coverage for such forfeit under the ISO New England Billing Policy. Any financial assurance that is forfeited pursuant to Section III.13 shall be used to reduce charges incurred by load in the relevant Capacity Zone.

III.13.1.9.2.4. Financial Assurance for New Import Capacity Resources.

A New Import Capacity Resource that is backed by a new External Resource or will be delivered over an Elective Transmission Upgrade with a Capacity Network Import Interconnection Service Interconnection Request pursuant to Schedule 25 of Section II of the Transmission, Markets and Services Tariff shall be subject to the same financial assurance requirements as a New Generating Capacity Resource, as described in Section III.13.1.9.1 and Section III.13.1.9.2. Once the new External Resource or the Elective Transmission Upgrade achieves FCM Commercial Operation, the New Import Capacity Resource shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as described in Section III.13.1.9. A New Import Capacity Resource that is backed by one or more existing External Resources or by an external Control Area shall be subject to the same financial assurance requirements as an Existing Generating Capacity Resource, as governed by the ISO New England Financial Assurance Policy.

III.13.1.9.3. Qualification Process Cost Reimbursement Deposit.

For each New Capacity Show of Interest Form and New Demand Capacity Resource Show of Interest Form submitted for the purposes of qualifying for either a Forward Capacity Auction or reconfiguration auction, the Project Sponsor must submit to the ISO a refundable deposit in the amount shown in the table below ("Qualification Process Cost Reimbursement Deposit"). The Qualification Process Cost Reimbursement Deposit must be received in accordance with the ISO New England Billing Policy. Such deposit shall be used for costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3.

An additional Qualification Process Cost Reimbursement Deposit is not required if: (i) the Project Sponsor is actively seeking qualification for another Forward Capacity Auction or annual reconfiguration auction, or is having the project's critical path schedule monitored pursuant to Section III.13.3; and (ii) the costs already incurred in the qualification process and critical path schedule monitoring do not equal or exceed 90 percent of the amount of the previously-submitted Qualification Process Cost Reimbursement Deposit(s). The ISO shall provide the Project Sponsor with an annual statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. In any case where resources are aggregated or disaggregated, the associated Qualification Process Cost Reimbursement Deposits will be adjusted as appropriate. After aggregation or disaggregation of resources, historical data regarding the costs already incurred in the qualification process of the original resources will no longer be provided. Coincident with the issuance of the annual statement, where incurred costs are equal to or greater than 90 percent of the Qualification Process Cost Reimbursement Deposit(s) previously submitted, the ISO will issue an invoice in the amount determined pursuant to the Qualification Process Cost Reimbursement Deposit table contained in Section III.13.1.9.3.1 plus any excess of costs incurred to date by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owners, associated with the qualification process described in Section III.13.1 and with the critical path schedule monitoring described in Section III.13.3. Any refunds that may result from aggregation of resources will be issued coincident with the annual statement. Payment on the invoice must be received in accordance with the ISO New England Billing Policy. If the Project Sponsor fails to pay the amount due by the stated due date, the ISO will consider the resources that were invoiced withdrawn by the Project Sponsor. Such a withdrawal shall be irrevocable, and payment on the invoice after the due date will not remedy the failure to pay or the withdrawal.

III.13.1.9.3.1. Partial Waiver Of Deposit.

A portion of the deposit shall be waived when there is an active Interconnection Request and an executed Interconnection Feasibility Study Agreement or Interconnection System Impact Study Agreement under Schedule 22, 23 or 25 of Section II of the Transmission, Markets and Services Tariff or where a resource modification does not require a revision to the Interconnection Agreement.

New Generating Capacity Resources ≥	New Generating Capacity Resources <	Imports and New Demand Capacity	New Generating Capacity Resources
20 MW or an Import	20 MW and ≥ 2 MW	Resources	< 2 MW
Capacity Resource			

associated with an Elective Transmission Upgrade that has not achieved Commercial Operation as defined in Schedule 25 of Section II of the Transmission, Markets and Services Tariff Including Up-rates, Re-powering, Environmental Compliance &			
Intermittent Power Resources	Intermittent Power Resources		
\$25,000	\$7,500	\$1,000	\$500
With Executed Interconnection Feasibility Study Agreement or System Impact Study Agreement	With Executed Interconnection Feasibility Study Agreement or System Impact Study Agreement		
\$15,000	\$6,500	n/a	n/a

III.13.1.9.3.2. Settlement of Costs.

III.13.1.9.3.2.1. Settlement Of Costs Associated With Resources Participating In A Forward Capacity Auction Or Reconfiguration Auction.

Upon the latter of: (i) the first day of the Capacity Commitment Period for which a resource offers into the Forward Capacity Market or (ii) the date on which the entire resource is accepted by the ISO for FCM Commercial Operation, the ISO shall provide the Project Sponsor with a statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. If any portion of the Qualification Process Cost Reimbursement Deposit exceeds the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the

affected Transmission Owner(s) associated with the qualification process and critical path schedule monitoring, the ISO shall refund to the Project Sponsor the excess including interest calculated in accordance with 18 CFR § 35.19a(a)(2). If the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of the affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring exceed the Qualification Process Cost Reimbursement Deposit, the Project Sponsor shall pay such excess, including interest calculated in accordance with 18 CFR § 35.19a(a)(2) – For Demand Capacity Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

III.13.1.9.3.2.2. Settlement Of Costs Associated With Resources That Withdraw From A Forward Capacity Auction Or Reconfiguration Auction.

Upon the withdrawal or failure to meet the requirements of the qualification process set forth in Section III.13.1, the ISO shall provide the Project Sponsor with a statement in writing of the costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. A Project Sponsor that withdraws or is deemed to have withdrawn its request for qualification shall pay to the ISO all costs prudently incurred by the ISO and its consultants, including the documented and reasonablyincurred costs of affected Transmission Owner(s), associated with the qualification process and critical path schedule monitoring. The ISO shall refund to the Project Sponsor any portion of the Qualification Process Cost Reimbursement Deposit that exceeds the costs associated with the qualification process and critical path schedule monitoring incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), including interest calculated in accordance with 18 CFR § 35.19a(a)(2). The ISO shall charge the Project Sponsor the amount of such costs incurred by the ISO and its consultants, including the documented and reasonably-incurred costs of affected Transmission Owner(s), that exceeds the Qualification Process Cost Reimbursement Deposit, including interest calculated in accordance with 18 CFR § 35.19a(a)(2). For Demand Capacity Resources, the ISO shall provide all of the above concurrently with the annual statement required under Section III.13.1.9.3.

III.13.1.9.3.2.3. Crediting Of Reimbursements.

Cost reimbursements received (excluding amounts passed through to the ISO's consultants and to affected Transmission Owner(s)) by the ISO pursuant to this Section III.13.1.9.3.2 shall be credited against revenues received by the ISO pursuant to Section IV.A.6.1 of the Transmission, Markets and Services Tariff.

III.13.1.10. Forward Capacity Auction Qualification Schedule.

Beginning with the timeline for the Capacity Commitment Period beginning on June 1, 2017 (the eighth Forward Capacity Auction), and for each Capacity Commitment Period thereafter, the deadlines will be consistent for each Capacity Commitment Period, as follows:

- (a) each Capacity Commitment Period shall begin in June;
- (b) the Existing Capacity Retirement Deadline will be in March, approximately four years and three months before the beginning of the Capacity Commitment Period;
- (c) the New Capacity Show of Interest Submission Window will be in April, approximately four years and two months before the beginning of the Capacity Commitment Period;
- (d) the Existing Capacity Qualification Deadline will be 90 days after the Existing Capacity Retirement Deadline, approximately four years before the beginning of the Capacity Commitment Period;
- (e) the New Capacity Qualification Deadline will be in June or July that is just under four years before the beginning of the Capacity Commitment Period; and
- (f) the Forward Capacity Auction for the Capacity Commitment Period will begin in February approximately three years and four months before the beginning of the Capacity Commitment Period.

III.13.1.11 Opt-Out for Resources Electing Multiple-Year Treatment.

Beginning in the qualification process for the ninth Forward Capacity Auction (for the Capacity Commitment Period beginning June 1, 2018), any resource that had elected in a Forward Capacity Auction prior to the ninth Forward Capacity Auction (pursuant to Section III.13.1.1.2.2.4 or Section III.13.1.4.1.1.2.7) to have the Capacity Supply Obligation and Capacity Clearing Price continue to apply after the Capacity Commitment Period associated with the Forward Capacity Auction in which its New Capacity Offer cleared may, by submitting a written notification to the ISO no later than the Existing Capacity Qualification Deadline (or, in the case of the ninth Forward Capacity Auction, no later than September 19, 2014), opt-out of the remaining years of the resource's multiple-year election. A decision

to so opt-out shall be irrevocable. A resource choosing to so opt-out will participate in subsequent Forward Capacity Auctions in the same manner as other Existing Capacity Resources.

1		UNITED	STATES OF A	MERICA
2			BEFORE THE	
3 4		FEDERAL ENERG	Y REGULATO	ORY COMMISSION
5 6 7		New England Inc. and England Power Pool)	Docket No. ER21000
8 9 10 11 12 13 14 15	I.	JOIN MATHEW BREWSTE ON BEHALF O	OF ISO NEW E	STOPHER GEISSLER
16 17	Q:	Please state your name, pos	ition and busine	ess address.
18	A:	Mr. Brewster: My name is M	atthew Brewster	. I am a Supervisor in the Market
19		Development department at I	SO New England	d Inc. (the "ISO"). My business
20		address is One Sullivan Road	, Holyoke, Mass	achusetts 01040.
21				
22		Dr. Geissler: My Name is Ch	ristopher Geissl	er. I am a Principal Economist at
23		ISO New England Inc. (the "	ISO"). My busir	ness address is One Sullivan Road,
24		Holyoke, Massachusetts 0104	10.	
25				
26	Q:	Please describe your respon	sibilities, work	experience and educational
27		background.		
28	A:	Mr. Brewster: In my current	position, I am re	esponsible for directly supervising a
29		group of analysts and have re	sponsibilities to	assist with coordinating the work of
30		the Market Development dep	artment. I perfor	rmed the work represented in this

1	filing while in my prior position as a Principal Analyst in the Market
2	Development department, when my responsibilities focused on leading projects to
3	improve the wholesale markets, advancing proposals through the stakeholder
4	process, and supporting the implementation of market changes.
5	
6	My project assignments have focused primarily on the ISO's Forward Capacity
7	Market ("FCM"). I assisted in the development of the prior system-wide demand
8	curve design and related changes that the Federal Energy Regulatory Commission
9	(the "Commission") accepted in 2014 in Docket No. ER14-1639-000. ² I led the
10	project to revise the FCM's annual reconfiguration auctions to incorporate the
11	system-wide demand curve, which the Commission accepted in 2015 in Docket
12	No. ER15-2404-000. ³ Most recently, I led the project to develop conforming
13	changes and enhancements for the FCM's "Competitive Auctions with Sponsored
14	Policy Resources" substitution auction, which the Commission accepted in 2019
15	in Docket No. ER19-444-000. ⁴
16	
17	I have been employed by the ISO since 2008. Between 2008 and 2011, I worked

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 (the "Tariff"), the Second Restated New England Power Pool Agreement and the Participants Agreement. Market Rule 1 is Section III of the Tariff.

in the Market Analysis and Settlements Department in analyst roles focused on

² 147 FERC ¶ 61,173 (2014).

³ 153 FERC ¶ 61,017 (2015).

⁴ 166 FERC ¶ 61,061 (2019).

settlement accuracy and software and procedural changes. In 2011, I joined the Market Development department in an analyst position. For a period between 2015 and 2017, I worked as an analyst for the ISO's Internal Market Monitor with responsibilities for evaluating and reporting on the performance of the wholesale electric markets. In 2017, I rejoined the Market Development department as a Lead Analyst. In November of 2020, I was promoted to my current position as a supervisor in the Market Development department.

I hold a B.B.A. in Operations Management from the University of Massachusetts

Amherst and a M.S. in Engineering Management from Western New England

University.

Dr. Geissler: My primary responsibilities at the ISO include wholesale electricity market design and development. Among my notable, relevant experience, I served as the project lead in designing the demand curves used in the FCM, which help align the region's procurement of capacity with its marginal reliability impact and were filed in Docket No. ER16-1434-000⁵; I served as the project lead in designing a substitution auction for state-supported policy resources (*i.e.*, the CASPR project) filed in Docket No. ER18-619-000;⁶ and I served as the ISO's lead economist in evaluating the price treatment of resources retained for fuel

⁵ 155 FERC ¶ 61,319 (2016).

⁶ 162 FERC ¶ 61,205 (2018).

security in the FCM in Docket No. ER20-1567-000.⁷ Most recently, I provided an affidavit in support of the ISO's response to the Commission's July 1, 2020, order to evaluate the continued need for the price-lock mechanism in the FCM in Docket No. EL20-54-000.⁸ I am also an instructor for numerous market-related sections of the ISO's Wholesale Energy Markets courses for ISO staff and Market Participants.

Prior to joining the ISO in 2013, I received an M.A. and Ph.D. in Economics from Duke University, where I conducted research on competition in regulated industries.

Q: What role did you play in developing the Tariff changes that are the subject of this testimony?

A: Mr. Brewster: I served as the ISO's project lead for performing the update to the Dynamic De-List Bid Threshold ("DDBT") that is required, per the Tariff, for the 16th Forward Capacity Auction that will be held in February of 2022, and corresponds with the FCM's 2025-2026 Capacity Commitment Period. In that role, I worked with a team of economists and analysts to evaluate possible approaches to the DDBT calculation and to develop the details of the design the ISO is filing. I also reviewed and discussed these changes with stakeholders over the course of a five-month stakeholder process.

⁷ 173 FERC ¶ 61,106 (2020).

⁸ 172 FERC ¶ 61,005 (2020).

1 2 Dr. Geissler: I served as the ISO's lead economist for performing this update to 3 the DDBT. In that role, I provided guidance on establishing the objectives for the 4 design of the DDBT calculation methodology, evaluated possible designs for the 5 methodology, and assisted with the development and analysis of the design for the 6 DDBT calculation method the ISO is proposing in this filing. 7 II. 8 PURPOSE AND ORGANIZATION OF TESTIMONY 9 What is the purpose of your testimony? 10 Q: 11 A: The purpose of our testimony is to explain the proposed Tariff changes to 12 improve the methodology for calculating the DDBT. The DDBT is a price-based 13 threshold that serves as a screen to identify which Forward Capacity Auction 14 ("FCA") de-list bids (i.e., priced offers to withdraw capacity from an existing 15 resource) are reviewed by the ISO's Internal Market Monitor ("IMM") in advance 16 of the FCA to prevent the possible exercise of supplier-side market power. 17 18 Q: Why is the ISO proposing to modify the methodology for calculating the 19 **DDBT?** 20 A: Currently, the Tariff does not specify a methodology for calculating the DDBT, 21 but rather includes the DDBT value and an obligation to update that value at least 22 once every three years and file the updated value with the Commission. To date, 23 the ISO has utilized variations of a manually intensive and non-transparent

approach to calculate the DDBT. ⁹ The prior approach requires many challenging
and non-transparent judgments on the choice of historical inputs. While the
Commission has accepted each of the prior DDBT updates using the prior
method, the ISO recognizes that there are benefits to utilizing a simpler and more
transparent methodology. A simpler methodology will allow the ISO to more
frequently update the DDBT value, so that it more accurately reflects current
market conditions. A transparent (and less subjective) methodology will also
afford stakeholders with greater clarity and insight into how the DDBT value is
determined. The proposed methodology achieves these improvements, and
incorporates the calculation into the Tariff, which will avoid the need for the ISO
to refile the DDBT value (and the underlying calculation methodology) with the
Commission each time the ISO performs the recalculation.
If accepted by the Commission, the ISO will apply the new method to recalculate
the DDBT for the sixteenth Forward Capacity Auction (FCA 16), to be held in
February 2022, and annually for each FCA thereafter.
How is your testimony organized?
Following the introductory sections, our testimony is organized as follows:

Q:

A:

⁹ While the IMM has historically played a primary role in setting the DDBT, throughout our testimony, we refer to all work pertaining to the setting of the DDBT as being conducted by the ISO.

Section III addresses the role of the DDBT in the FCA mitigation design: its
function, purpose, and the target level. The DDBT is an existing and longstanding feature of the FCA's mitigation design. The proposal does not alter
the mitigation framework, and is instead only establishing an improved
method for setting the DDBT at its target level.

• Section IV provides a brief review of the method used previously to calculate
the DDBT on a periodic basis. The prior method was employed for the three
most-recent updates of the DDBT that occurred prior to the ninth, tenth, and
thirteenth FCAs, which the ISO filed with the Commission in 2014, 2015, and

2018, respectively.

- Section V discusses the design objectives that the ISO applied to develop and evaluate methods for calculating the DDBT.
 - Section VI explains the new method for setting the DDBT annually for each
 FCA. This section covers the design concept and the improvements it offers,
 along with the details of the calculation inputs and mechanics.
- Finally, Section VII presents the results of a numerical analysis performed on recent auction data to evaluate the *ex ante* performance of the new method for setting the DDBT. The numerical analysis indicates that, on average, the new

1		method would set the DDBT closer to its target level than the method actually
2		employed to date.
3		
4	III	. THE ROLE OF THE DDBT IN THE FCA MITIGATION DESIGN
5		
6	Q:	Please summarize the role of the DDBT in the Forward Capacity Auction.
7	A:	The DDBT is an existing feature of the mitigation framework for the FCA. The
8		DDBT is used—in concert with other mitigation rules—to protect against a
9		potential exercise of supplier-side market power in the FCA. To prevent an
10		exercise of supplier-side market power in the FCA, the IMM is charged with
11		reviewing suppliers' bids to withdraw existing capacity from the market (referred
12		to as "de-list bids"). The DDBT is a screening tool that determines, by stipulating
13		a screening price range, the de-list bids that the IMM will review. That is, de-list
14		bids priced above the DDBT's value will be subject to IMM review prior to the
15		FCA, and de-list bids priced below the DDBT's value will not be subject to IMM
16		review.
17		
18	Q:	Please briefly explain the exercise of supplier-side market power in the FCA.
19	A:	Supplier-side market power may be exercised by a capacity supplier that submits
20		a bid for a portion of its capacity portfolio at a price above the supplier's true cost
21		of supplying that capacity. In the absence of mitigation, the inflated de-list bid

price could raise the auction's clearing price, which could enable the supplier (and

all other suppliers that clear and receive the same clearing price)¹⁰ to profit from the higher price paid to their remaining portfolio, resulting in excess costs to consumers. While several conditions must be met for market power to be effective, we are focused on the act of the supplier attempting to raise its bid price above its true cost of supplying that capacity. The DDBT is a mechanism, employed as part of the mitigation process of evaluating de-list bids, to prevent such bid price inflation and its potentially adverse impact on market outcomes.

Q:

A:

What steps are required of the ISO to prevent a supplier's attempt to raise its bid price above a competitive level?

The Tariff specifies various steps to address the potential exercise of market power in the FCA. One such step, in which the DDBT plays a role, is the IMM's obligation to review de-list bids to assess whether those bids reflect the supplier's true cost to provide capacity. Specifically, the Tariff requires that the IMM review certain de-list bids for existing capacity resources in advance of the FCA to determine whether a supplier is offering that capacity at a price that is above the supplier's true cost to supply that capacity.

Q: Is the IMM required to review *all* de-list bids in advance of the auction?

No. The IMM is required to perform a detailed cost review only for those de-list bids for existing capacity with prices that are at or above the DDBT value. Thus, the DDBT sets the line of demarcation between the de-list bids that must be

A:

^{. .}

¹⁰ Throughout this testimony, we use the term "clear" to mean the supplier sells capacity.

1		reviewed by the IMM in advance of the auction (during the qualification process)
2		for the possible exercise of market power, and those that do not need to be
3		reviewed in advance, based on the supplier's preferred price for their de-list bid.
4		
5	Q:	Please explain how the DDBT is employed in the FCA qualification process.
6	A:	All de-list bids with prices at or above the DDBT value must be submitted to the
7		IMM in advance of the FCA and undergo a detailed cost review to determine
8		whether the bid price reflects the supplier's cost for that capacity. 11 There are
9		several types of de-list bids that have unique requirements and deadlines. For
10		present purposes, it will suffice to summarize in general terms how the DDBT
11		relates to the qualification process for a supplier's de-list bid.
12		
13		The de-list bids that must be submitted in advance of the FCA are required as
14		early as 11 months before the FCA. Upon submittal, the IMM begins an
15		extensive review of the information provided by the supplier to verify whether (a)
16		the bid reflects the supplier's true cost, or (b) instead, the supplier's price is
17		materially higher than the IMM's estimate of the supplier's costs for that capacity.
18		If the supplier's bid price is materially higher than the IMM's estimate, the IMM
19		issues an IMM-determined de-list bid price." Thereafter, the Tariff allows a
20		supplier certain, limited opportunities to adjust the de-list bid price below the
21		IMM-determined price, or to withdraw the de-list bid altogether. Subsequently,

Note that certain de-list bids are submitted before the FCA regardless of whether or not their bid price is above DDBT; however, the IMM is not required to perform a cost review for those submitted with a bid price below the DDBT.

the finalized de-list bids are filed for the Commission's approval several months ahead of the FCA. If approved, these bids will be is used in the auction clearing process when mitigation is necessary. Regardless of whether the pre-submitted bid is entered into the auction clearing process at the supplier's price or the IMM-determined price, the supplier will have no flexibility to change its bid price for that capacity during the auction. If the auction price descends below the pre-submitted de-list bid's price, the capacity is withdrawn from the auction at that pre-determined bid price.

Q:

A:

Does the DDBT play a role during the conduct of the FCA?

As we have described, the DDBT is the point of demarcation between de-list bids that are and are not reviewed by the IMM in advance of the FCA. Thus, the role of the DDBT during the FCA is to define when de-list bids can be submitted during the auction process itself. Within the FCA, the descending clock auction is where the final bid and offer prices are collected from all suppliers. If the descending clock auction's price falls below the DDBT value, then suppliers with existing capacity remaining in the auction are able to use "dynamic" bids to indicate their preferred offer price for that capacity. These Dynamic De-List Bids are not subject to IMM cost review and the supplier is free to withdraw the capacity using dynamic bids at any price below the DDBT.

Q: What is the target level for the DDBT?

A: Conceptually, the ideal—or "target"—level for the DDBT is the next auction's clearing price under competitive conditions. By "under competitive conditions," we mean specifically the expected clearing price for the next auction if it *does not reflect* the exercise of supplier-side market power. We call this the "competitive clearing price" hereafter.

Q:

A:

Can you explain why setting the target level for the DDBT at the competitive clearing price will ensure that all de-list bids that could represent the exercise of market power are reviewed?

Yes. In order to raise the clearing price above the auction's competitive clearing price (in an attempt to exercise supplier-side market power), *first* a supplier must have true costs at or below this price. If the supplier offered its capacity competitively, it would sell its capacity in the auction (by virtue of offering below the competitive clearing price). To successfully exercise market power and raise the auction-clearing price above its competitive level, the supplier must *instead* raise its bid price above the competitive clearing price.

The basic auction mechanics of aligning supply and demand to find their point of intersection (and the price at that intersection) illustrate why it is appropriate to review all de-list bids that are priced above the competitive clearing price to determine whether any of these bids represent an attempt to raise the clearing price using an inflated bid. When a supplier's true cost to provide capacity is

below the competitive clearing price and it submits a bid above the competitive clearing price (*i.e.*, the bid is inflated), the bid will generally lead the auction's clearing price to exceed its competitive level, thereby reflecting an exercise of supplier-side market power.

Q:

Can you provide an example to illustrate an outcome where a supplier uses an inflated bid price to increase the clearing price above the competitive clearing price?

Yes. Such an outcome is illustrated in Figure 1, which consists of two panels showing the auction outcome when supplier S offers its capacity competitively (left panel) and when it exercises market power by submitting a de-list bid priced above both its true costs and the auction's competitive clearing price (right panel). In each panel, supply is represented by the upward sloping blue curve, and demand by the downward sloping red curve. The horizontal axis represents the auction's capacity quantity, and the vertical axis represents the capacity price.

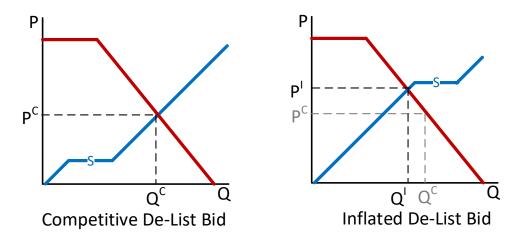


Figure 1: By increasing its bid price *above* the competitive clearing price, supplier S increases the auction-clearing price

In the left panel, when S offers its capacity competitively, the auction produces the competitive clearing price of P^C and supplier S is selected to sell capacity. However, in the right panel, supplier S instead inflates its de-list bid price above its true cost of supplying that capacity and above the competitive clearing price P^C . In this uncompetitive case in the right panel, supplier S is no longer selected to sell capacity, the quantity of capacity acquired in the auction *decreases* to Q^I , and this exercise of market power *increases* the clearing price to P^I .

Q:

Can you explain why setting the DDBT's target level at the competitive clearing price will ensure that all de-list bids that cannot exercise market power are *not* reviewed?

16 A: Yes. As explained above, to raise the clearing price, a bid must be submitted at a
17 price above the competitive clearing price. As a result, any supplier that submits
18 a de-list bid *below* the competitive clearing price cannot increase the auction's

clearing price, even if the submitted de-list bid price was inflated above the supplier's true costs of that capacity.

This is illustrated in Figure 2 below, which includes the same two panels as Figure 1 above, except that supplier S is now assumed to inflate its de-list bid price to a lesser value, below the competitive clearing price of P^C. Observe that in this case, even though supplier S's bid price exceeds its true cost of supplying capacity, the bid price below P^C has no impact on auction's clearing outcome. This is because S's bid price, in this case, remains inframarginal. Thus, in such cases, it is not necessary to review whether or not supplier S submitted a bid that reflects its true cost; in this situation, the exact de-list bid price—by virtue of being below the auction's competitive clearing price—has no adverse impact on the auction outcomes.

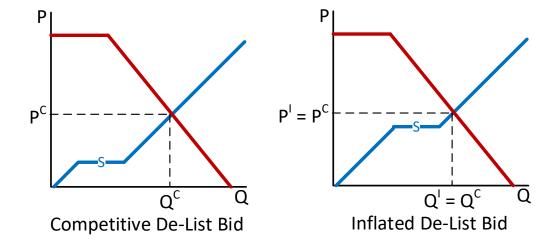


Figure 2: By increasing its de-list bid price *but remaining below* the competitive clearing price, supplier S does not increase the auction-clearing price

1	Q:	Given your explanation of the target level for the DDBT, are there other
2		considerations that must be addressed in determining how to calculate the
3		DDBT?
4	A:	Yes. To the extent possible, it is important to employ a method that sets the
5		DDBT value at the auction's competitive clearing price. When this is achieved,
6		all de-list bids that may represent the exercise of supplier-side market power are
7		reviewed, and those that cannot exercise market power avoid the burden of an
8		unnecessary mitigation review.
9		
10		It is nonetheless important to recognize that the DDBT must be established almost
11		a year before the auction occurs. It is impossible for the ISO to estimate a future
12		auction's competitive clearing price perfectly a year in advance. In practice, a
13		DDBT value may be either below or above the actual competitive clearing price,
14		because the actual clearing price will only be revealed when the FCA is
15		conducted.
16		
17		One might assume, then, that the best approach to setting the DDBT would be to
18		"err on the side of caution" and set the value low as a conservative approach to
19		detecting attempts to exercise market power. However, setting the DDBT value
20		below the competitive clearing price can also adversely impact competition during
21		the auction, as it will increase the occurrence of unnecessary interference with
22		bids that cannot exercise market power and frustrate the ability of suppliers to
23		reflect their willingness to sell capacity during the auction.

1

2 For example, if the DDBT was deliberately set below the target level of the 3 competitive clearing price, then a de-list bid that cannot exercise market power 4 (by virtue of being below the competitive clearing price) might still need to be 5 reviewed by the IMM if it was above this (low) DDBT value. To clarify this 6 example, assume a supplier's bid reflecting its true cost to provide capacity will 7 fall between this (low) DDBT value and the auction's (higher) competitive 8 clearing price. In that case, the bid would need to be pre-submitted to the IMM 9 and have its final price determined during the FCA's qualification process—many 10 months in advance of the FCA—despite the fact that the supplier's bid, submitted 11 at a price below the competitive clearing price, cannot exercise market power to 12 raise the auction's clearing price. That situation would inhibit the supplier's 13 ability to incorporate any updated resource-specific cost information learned after 14 its pre-submitted bid is finalized, or to incorporate information about market 15 conditions revealed during the auction that may affect the cost of a capacity 16 obligation. In the worst-case scenario, deliberately setting the DDBT low could 17 adversely impact the supplier's ability to reflect its true cost of providing capacity 18 at the time of auction, and the market's ability to cover such costs or procure the 19 least-cost resources, despite the fact that the supplier in question could not 20 exercise market power. 22 These are examples of the considerations that the ISO has recognized in

21

23

developing a new DDBT calculation methodology, and which we will discuss in

1 explaining the design objectives. First, however, it will be useful to summarize 2 the prior method that was used in the past to calculate the DDBT—the limitations 3 of which motivated, in part, the new DDBT methodology that the ISO is filing. 4 5 IV. METHOD USED PREVIOUSLY TO CALCULATE THE DDBT 6 7 Q: Please describe the method that the ISO has employed previously for 8 calculating the DDBT value. 9 A: As we noted above, the Tariff does not currently contain a formula or method for 10 calculating the DDBT. Instead, the ISO has historically used a manual process to 11 calculate a DDBT value. That manual process involved estimating the marginal 12 resource's bid price for future auctions using a sample of (generally non-public) 13 bid prices from the latest FCA data available at the time of the analysis. The 14 resulting DDBT value, along with the ISO's explanation of its method and 15 assumptions, were filed with the Commission under Section 205 of the Federal 16 Power Act. For ease of reference, we refer hereafter to the prior manual process 17 to calculate the DDBT value as the "manual estimation method." 18 19 In three recent updates to the DDBT, the ISO has employed slight variants of the 20 manual estimation method. The common and central component of each variant 21 is to estimate competitive bid price(s) for the likely marginal resource(s) in the 22 upcoming auctions to which the DDBT would be applied.

To perform the manual estimation method, the ISO employed a competitive (or "optimal") bidding formula for capacity suppliers. This is a formula a capacity supplier would, in theory, utilize to develop a competitive bid price under the FCM's two-settlement capacity market design (also known as the Pay for Performance, or "PFP" design). That competitive bidding formula is described in detail in prior ISO filings; for present purposes, we note next its features that impact its application to the DDBT. 12

The manual estimation method attempts to calculate the competitive bid from the likely marginal resource—that is, the resource that will set the clearing price in the auction—using the aforementioned optimal bid formula. That formula has two components. The first component involves system-level parameters, and reflects certain costs associated with a supplier's expected Capacity Performance Payments under the two-settlement capacity market design. Because this first component is common across all suppliers, we refer to it as the "common value component." The second, additive component reflects a supplier's resource-specific data, including the resource's expected performance and its going-

_

¹² See e.g., ISO New England Inc. and New England Power Pool, Filings of Performance Incentives Market Rule Changes, Docket No. ER14-1050-000 (filed January 17, 2014), Joint Testimony of David LaPlante and Seyed Parviz Gheblealivand on behalf of the ISO, at 53-61; ISO New England Inc. and New England Power Pool, Update to Forward Capacity Market Dynamic De-List Bid Threshold, Docket No. ER18-620-000 (filed January 8, 2018), transmittal letter at 8-15. For the FCA 10 update, the ISO employed a modified version of the optimal bid formula, which derived the DDBT through an analysis of de-list bids submitted in the prior auction from oil-fired steam capacity resources. See ISO New England Inc. and New England Power Pool, Market Monitoring-Related Capacity Market Changes, Docket No. ER15-1650-000 (filed May 1, 2015), Joint Testimony of Jeffrey R. McDonald and Robert V. Laurita at 6-13.

forward costs of continued operations. We emphasize that this second component is specific to the resource, and will refer to it below as a "resource-specific component" of a capacity supplier's competitive de-list bid price.

O:

A:

O:

A:

Is the ISO proposing to continue to use the manual estimation method?

No. While the manual estimation method has served as a reasonable approach for calculating the DDBT, it has a number of limitations. The ISO has taken each of these limitations into consideration, and sought to overcome them, in developing a new DDBT calculation methodology to replace this manual estimation method.

Please summarize the manual estimation method's limitations.

In summary, there are three limitations that the ISO identified as relevant when evaluating a new DDBT methodology. First, the manual estimation method relies heavily on certain confidential data, rendering the DDBT calculation non-transparent to stakeholders in important ways. Second, the method also relies on the ISO's ability to choose *which* prior auctions' bids are representative of the expected marginal price in future auctions, which is a process that is also non-transparent—and, by its very nature, requires application of judgments that cannot be fully vetted with stakeholders. Finally, by relying only on data from prior auctions, the risk increases that the DDBT value will become "stale" and no longer reflect the present market conditions for the auctions to which it is applied. In the past, a DDBT value has often continued to apply for several auctions between updates.

A:

Q: Please explain the first limitation, concerning the use of resource-specific bid data in the DDBT calculation.

To establish the resource-specific component of the formula using the prior manual estimation method, the ISO must estimate the net going forward costs of the likely marginal resource(s). To do so, the ISO has historically used confidential de-list bid data submitted by capacity suppliers in prior auctions to represent their costs to supply capacity. Using confidential data in this manner affords no transparency to stakeholders on a critical input into the DDBT calculation, as the core data used cannot be released publicly. This leaves stakeholders unable to assess the reasonableness of the inputs to the DDBT, or the reasonableness of any derivation of the values resulting from those bids. It further makes it difficult to fully explain the manual estimation method's DDBT results to stakeholders, and for it to be vetted through the stakeholder process.

Finally, this aspect of the manual estimation method is highly dependent on having a set of historic de-list bids that can be used to estimate the future competitive clearing price. In practice, there may be instances where the data sample is limited, or is unlikely to be particularly informative for estimating the competitive clearing price. For instance, under the FCA's descending clock auction format, the prior year's auction may not "descend" to a low enough price level in order to collect de-list bid information in a price range that is informative

to estimating the competitive clearing price in future auctions (particularly if capacity demand is declining in the upcoming auction as well).

Q:

A:

Please explain the second limitation, about the sampling of bids used in the prior manual estimation methodology.

While the manual estimation methodology employs the optimal bid formula—an economically-supported formula that can be employed by suppliers looking to submit competitive bids for their capacity— this formula does not, however, provide guidance on the choice of the bids that *should be analyzed* when attempting to update the DDBT using a manual estimation method. In order to achieve the DDBT's intended purpose, the optimal bid formula must be applied to an appropriate set of bids. That is, the ISO must choose *historical* bids representing the likely marginal resources in *future* auctions so that the resulting DDBT value reflects the expected competitive clearing price over the period that the DDBT will apply.

That historical bid selection (or sampling) process relies on the judgement of those at the ISO responsible for performing the calculation to choose which resource(s) are likely to be the marginal supplier(s) in a future auction, and which resources are not. Further, because of the highly confidential and market-sensitive nature of both the individual resources' bid price data and the general "shape" of the market's supply curve near the auction's clearing price, it is not possible for the ISO to discuss all of the information it considers and reviews in

1		selecting the sample bids with stakeholders when using the prior method. That
2		fact, again, makes the prior manual estimation method non-transparent and
3		difficult for stakeholders to evaluate.
4		
5	Q:	Please explain the third limitation, concerning the DDBT value becoming
6		"stale" under the manual estimation method.
7	A:	The third concern is that if the manually-estimated DDBT is applied for multiple
8		auctions without revisions, it will become stale. In other words, the DDBT will
9		not function as a reasonable estimate of the competitive clearing price of the
10		auction(s) to which it is applied. That is no small limitation; a "stale" DDBT can
11		negate its effectiveness and its purpose.
12		
13		In practice, the "stale DDBT" problem associated with the manual estimation
14		method is the result of two factors. The first factor is the multi-year (i.e., less than
15		annual) frequency of DDBT updates performed using the manual estimation
16		method, and the second factor is the latency (i.e., out-of-date) data employed in
17		the manual estimation method.
18		
19		As noted previously, the Tariff currently requires a DDBT recalculation at least
20		once every three years, although the ISO can recalculate the DDBT more
21		frequently. In practice, market conditions that affect the FCA's competitive
22		clearing price can, and do, change from auction to auction. Although the clearing
23		price may not change greatly between auctions, even small changes in market

conditions (such as updates to the aggregate capacity demand curve each year) can result in the DDBT becoming stale over time as market conditions move away from the assumptions used to calculate the DDBT value. However, owing to the sensitive and manually-intensive nature of the manual estimation process, the DDBT recalculations have generally not been performed more frequently than is required by the Tariff.

A stale DDBT value can also arise because, even for the first year in which a new DDBT value is used, the latest auction data available may be two years old. More specifically, because the manual estimation process specifies a number rather than a methodology in the Tariff, and because this value must be finalized nearly 11 months before the FCA (at the start of the nearly year-long qualification process), the manual estimation method has recently needed to rely on data that was two years old by the time of the first auction to which the DDBT was applied.

Observe that the DDBT update performed for FCA 13 (the most recent update using manual estimation) relied on auction data from FCA 11, which meant the bids and other auction information that served as the basis for the calculation were two years out of date by the first auction to which that DDBT value applied.

1	v .	DESIGN OBJECTIVES FOR SETTING THE DUDT
2 3	Q:	Please summarize the role of the design objectives in the new DDBT
4		method's development.
5	A:	As with most projects, the ISO identified at the outset a set of design objectives
6		that it sought to satisfy with the DDBT calculation method. These objectives
7		should be well understood and broadly consistent with sound market design
8		principles. Once these objectives were identified, we considered various
9		approaches and evaluated whether each would satisfy these objectives.
10		
11	Q:	What design objectives does the new DDBT method seek to satisfy?
12	A:	The ISO identified three design objectives that it sought to satisfy with the new
13		DDBT calculation method.
14		
15		1. Prevent the exercise of supplier-side market power. A sound mitigation
16		approach should seek to identify and review any de-list bids from suppliers tha
17		could exercise supplier-side market power by increasing the capacity clearing
18		price above the competitive level.
19		
20		2. Limit unnecessary administrative interference in the FCM that may
21		reduce the market's efficiency. The review of de-list bids can be burdensome
22		for suppliers and for the IMM, and may reduce a supplier's ability to accurately
23		reflect its true costs of supplying capacity. As a result, the mitigation approach
24		should seek to avoid requiring the review of bids that do not present a risk of

1		exercising market power.
2		
3		3. Use a transparent and robust calculation methodology. As the ISO
4		considered the concerns with the prior method used to calculate the DDBT, we
5		were particularly attuned to identifying a practical design that is transparent and
6		well understood by stakeholders, and that produces DDBT values suitable to a
7		wide range of potential market conditions.
8		
9	Q:	Please explain the rationale behind design objective 1, which is to prevent the
10		exercise of supplier-side market power by capacity sellers.
11	A:	The first design objective aligns with the core purpose of the DDBT, which is to
12		help protect the FCA against (i.e., mitigate) a potential exercise of supplier-side
13		market power. If the DDBT would be unable to support this core purpose of the
14		mitigation framework, the FCM could fail to produce efficient outcomes and
15		competitive prices. Consumers, who incur the costs to procure capacity, could be
16		forced to pay a capacity price that exceeds the competitive clearing price.
17		
18	Q:	How does design objective 1 inform the ISO's new approach to setting the
19		DDBT?
20	A:	Generally speaking, approaches that produce lower DDBT values perform better
21		with respect to design objective 1. The logic is simple: as the DDBT value
22		decreases, a larger number of de-list bids are reviewed for the potential exercise
23		of supplier-side market power. As such, the broader the range of bid prices that

1 are subject to IMM review, the lower the chances are that a supplier can exercise 2 market power in the FCA. 3 4 Observe, however, that an approach that would most fully satisfy design objective 5 1 is the extreme approach in which the DDBT is fixed at a price of zero and every supplier (other than those who prefer to act as "price-takers" in the market) must 6 7 have its bid reviewed. While such an approach would reduce concerns about 8 supplier-side market power in the FCA, it would have other potentially 9 deleterious effects with respect to the other design objectives. 10 11 O: Please explain the rationale behind design objective 2, which is to limit the 12 administrative interference in the market. 13 As we have explained, the DDBT is the point of demarcation between de-list bids A: that will be subject to review for mitigation (those above the DDBT) and those 14 15 that will not (those below the DDBT). The mitigation review process introduces 16 administrative layers to FCA participation that can reduce the market's efficiency 17 through three mechanisms. 18 19 First, as noted earlier, the IMM's review of a de-list bid can improve market 20 efficiency when the IMM's estimate of the supplier's competitive bid is a more 21 accurate reflection of the supplier's true costs to provide capacity, as this helps the 22 market achieve a competitive clearing price. However, this review can have the 23 opposite effect if the IMM's estimate of the supplier's competitive bid is instead a

less accurate measure of its true costs to supply capacity. In such cases, the mitigation process reduces market efficiency by preventing the supplier from reflecting its true costs in its bid price, and potentially requiring it to sell capacity at a lower price than it would willingly accept. To be clear, we are not suggesting the mitigation review is *likely* to produce a bid that is less reflective of the supplier's costs. However, with the ever-increasing complexity of resources' technologies and their attendant cost structures, the changes in energy market expectations with the region's rapidly-evolving resource mix, and the limitations inherent in any cost estimation process, errors are possible.

Second, the ISO employs a descending clock auction format in the FCA to determine capacity awards. Because all de-list bids submitted at a price above the DDBT require mitigation review, these de-list bids are finalized by October at the latest (approximately four months before the FCA occurs). As such, if market or resource conditions change after these bids are finalized, or unanticipated information about capacity market conditions is revealed during the FCA (where aggregate supply information is shared at the end of each auction round), then a supplier's de-list bid may no longer reflect its true cost to provide capacity at the time of the auction. Therefore, the potential for changes in market or resource conditions can produce inefficient outcomes if, either, (1) it results in a supplier *not selling capacity* in the auction because its bid price exceeds its true cost to supply capacity when the auction is run, or (2) it results in a supplier *selling capacity* in the auction because its bid price is below its true cost to supply

capacity when the auction is run. This inefficiency concern arises for suppliers with de-list bids entered at prices above the DDBT, because they must withdraw their capacity from the FCA if the auction clearing falls below their predetermined de-list bid price. However, this inefficiency concern generally does not arise for suppliers who submit their de-list bids below the DDBT during the FCA, because they can finalize their bid price during the FCA, and therefore can reflect their current valuation for selling capacity in the auction. Third, the process of developing and analyzing the cost information required for the de-list bid mitigation review is time consuming (and therefore costly) both for the supplier and for the IMM. While the mitigation review and its associated costs are necessary when there is a concern that market power could be exercised, it is prudent to avoid these costs when practical, in particular when a supplier's bid price is unlikely to reflect the exercise of market power. Each of these mechanisms illustrates a way in which the de-list bid mitigation process can be burdensome and could actually reduce market efficiency. The

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

29

DDBT calculation method design should seek to minimize these impacts in

situations when a supplier is unlikely to exercise market power.

1	Q:	How does design objective 2 inform the ISO's approach to setting the DDB1?
2	A:	Generally speaking, approaches that produce higher DDBT values perform better
3		with respect to design objective 2. The logic follows from the three mechanisms
4		described in response to the preceding question.
5		
6		First, as the DDBT value increases, the number of de-list bids reviewed for
7		mitigation will decrease. Accordingly, with fewer reviews, the likelihood
8		decreases that the mitigation review process will result in replacing a supplier's
9		competitive bid with an IMM-determined bid price that reflects a less accurate
10		estimate of the supplier's cost to provide capacity.
11		
12		Second, a higher DDBT value will reduce the number of de-list bids with prices
13		that must be pre-determined well in advance of the auction. Rather, more
14		suppliers will be able to incorporate up-to-date information about their costs and
15		market conditions when determining the final price at which they are willing to
16		sell capacity. Generally, allowing more suppliers to reflect current information in
17		their bids will support more efficient market outcomes.
18		
19		Third, having fewer de-list bids pre-submitted for cost review reduces the
20		administrative burden associated with assembling, submitting, and attesting this
21		information (by suppliers), and with reviewing and analyzing this information (by
22		the IMM).
23		

Observe, however, that the approach that most fully satisfies design objective 2 is the extreme case in which *the DDBT is fixed at the auction's starting price* (*i.e.*, the auction's maximum possible clearing price), in which case there would be no de-list bid reviews. While such an approach would reduce concerns about administrative interference that could reduce market efficiency, it would be ineffective at protecting against an exercise of supplier-side market power.

A:

Q: Please explain the rationale behind design objective 3, which is to use a transparent and robust calculation methodology to set the DDBT.

Using a transparent methodology will serve two important purposes in the DDBT calculation method design and the FCM. First, transparency in markets is generally consistent with sound market design, as market participants can develop more informed expectations about future DDBT values when they understand the methodology and inputs used to produce the DDBT value. Second, using only publicly-available inputs should reduce past concerns about the subjective aspects of the prior method (*e.g.*, the need to select "likely" marginal resources under the manual estimation method), and should reduce past concerns that the calculation of the DDBT value could provide sensitive information about the historic bid prices for specific resources or about the elasticity (or "shape") of the market's supply curve near its clearing price.

Developing a methodology that is robust to a broad range of market conditions and dynamic changes is similarly important. If the design would only produce a

1		reasonable DDBT value under limited market conditions, then it would require
2		potentially contentious ongoing revisions and modifications. This would diminish
3		the transparency of the design and its ability to support informed expectations
4		about future DDBT values.
5		
6	Q:	Is there a tension between these design objectives?
7	A:	Yes. As explained above, design objective 1 generally supports setting the DDBT
8		value at a lower price to allow for a cost review of more de-list bids. This will
9		reduce the likelihood that a bid that is attempting to exercise supplier-side market
10		power is not reviewed. However, design objective 2 instead supports setting the
11		DDBT value at a higher price to reduce adverse administrative interference in the
12		FCA.
13		
14		As a result, approaches to setting the DDBT that tend to perform better with
15		respect to design objective 1 will generally perform worse with respect to design
16		objective 2, and vice versa. Thus, in the development of the new DDBT method,
17		the ISO sought to reasonably balance these design objectives.
18		
19	Q:	How did the ISO consider the tradeoff between these first two design
20		objectives when developing the new DDBT method?
21	A:	As noted, the ISO sought to develop an approach that strikes an appropriate
22		balance between these design objectives. However, there is a tension between
23		them, and in such cases, we sought a design that recognizes the deleterious effects

of supplier-side market power while also appreciating that applying unnecessary administrative burden to the capacity market can reduce efficiency and create unnecessary costs for suppliers and consumers. Conceptually, the new design seeks to set a DDBT value that results in mitigation review for the set of higher-priced de-list bids that could have the greatest adverse impact on the FCA clearing price through the exercise of market power, while not requiring review for the set of lower priced de-list bids that appear less likely to be able to impact FCA outcomes through the exercise of market power. In our judgment, the new DDBT calculation method is consistent with a reasonable balance of these competing objectives.

Q:

A:

Are there other factors that you have taken into consideration in weighing the application of design objectives 1 and 2?

Yes, we considered the fact that a capacity supplier's ability to exercise market power depends, in part, on the extent to which its decision to offer capacity above its competitive price can affect the auction's clearing price. This is dependent on market conditions. More specifically, if the decision not to offer its capacity competitively can *significantly increase* the auction's clearing price, the supplier is more likely to have an incentive to attempt to exercise market power because the increased revenue for its remaining supply portfolio is larger for each megawatt ("MW") the suppler withholds. Moreover, under such conditions, the deleterious effects of non-competitive bids is greatest, as this act can more significantly increase consumer costs and reduce market efficiency.

However, if instead a capacity supplier's decision not to offer competitively has only a *modest impact* on the auction's clearing price, it is less likely that the supplier has an incentive to attempt to exercise market power because the additional revenue paid to its remaining supply portfolio will be small, and perhaps not enough to offset the entire revenue foregone by the withheld portion of its capacity. Moreover, under such conditions, the deleterious effects of such non-competitive bids are less significant because the price impact on consumers and the impact on market efficiency are smaller.

The extent to which a supplier is able to increase the clearing price in the auction through the exercise of market power—*i.e.*, having either a *significant* impact or a more *modest* impact—is dependent in part on the prevailing market conditions.

Q:

How can market conditions affect the impact that the exercise of market power has on the clearing price?

A: The extent to which a capacity supplier's attempted exercise of market power impacts the clearing price is closely related to the shape of the supply and demand curves in the range of the competitive clearing outcome. Generally, as the supply and demand curves become "flatter" (*i.e.*, more elastic), the price impact of withholding supply to exercise market power decreases. A flatter region of the supply curve indicates that cost differences between suppliers are less significant. Similarly, a flatter demand curve indicates that if a supplier does not sell capacity

(and as a result, the total cleared capacity decreases), then the increase in the clearing price will be modest.

Conversely, as a general rule, as the supply and demand curves become "steeper" (*i.e.*, more elastic), the price impact of withholding supply increases. Generally, the steeper regions of the aggregate supply curve reflect that differences in the costs to provide capacity are greater among suppliers in that region of the curve. Similarly, a steeper demand curve indicates that if a supplier does not sell capacity (and as a result, the total cleared capacity decreases), then the increase in the clearing price will be larger.

Q:

A:

Can you illustrate this phenomenon graphically?

Yes. We do so below using two figures. For purposes of discussion, we focus on the shape of the supply curve in the range of the auction's clearing outcome. However, as noted above, these observations also hold with respect to the shape of the demand curve in the range of the clearing outcome. We represent this phenomenon by comparing the impacts of market power under two cases — (i) where the capacity supply curve is relatively "steep," (the first figure) and (ii) where the capacity supply curve is relatively "flat" (the second figure).

Each figure shows the clearing outcome illustrated via the standard supply and demand framework under two conditions, with each condition represented in a panel. The horizontal axis represents the quantity of capacity and the vertical axis

represents the price associated with the capacity. The upward sloping curve corresponds to the aggregate supply of capacity offered. The downward sloping curve represents the aggregate demand curve, which the ISO determines prior to the FCA. In these figures, the clearing price and quantity correspond with the point at which the supply and demand curves intersect.

For each figure, the left panel assumes that supplier S submits its de-list bid at its true cost to provide capacity and calculates the auction's clearing price and quantity accordingly. The right panel assumes that supplier S instead submits a higher-priced bid that exceeds the competitive clearing price, consistent with an attempt to exercise market power. Both figures assume the same demand curve slope, but they assume different supply curve slopes.

Figure 3, the first of these two figures, provides an example of a supplier attempting to exercise market power when the supply curve is relatively steep in the range of the competitive clearing. The left panel represents the auction outcome when supplier S bids competitively into the auction. Under these competitive conditions, supplier S has an inframarginal bid (meaning it sells capacity) and the clearing price is equal to P^{C} . The right panel then represents the auction outcome when supplier S instead submits a higher-priced bid above its true costs to supply capacity, in an attempt to exercise market power. In this case, its higher-priced bid (S) is not selected to sell capacity, and the clearing price increases to P^{MP} . Observe that in this situation, where the supply curve is steep,

this price increase is large because the capacity that now becomes marginal (price-setting) is significantly more expensive than the de-list bid that would set the clearing price in the competitive case, at P^C. Thus, if the supply curve is steep, an exercise of market power is potentially very costly to consumers via a higher clearing price. Furthermore, it diminishes the efficiency of the market because the lower-priced capacity from supplier S is replaced with much more expensive capacity.

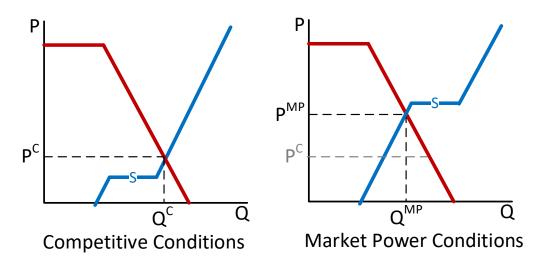


Figure 3: Non-competitive bidding by supplier S with a steep supply curve

Figure 4, the second of these two figures, provides an example of a supplier attempting to exercise market power when the supply curve is instead relatively flat in the range of the competitive clearing price. The left panel again represents the auction outcome when supplier S bids competitively into the auction. Under these competitive conditions, the bid from supplier S is, just as in the prior figure, inframarginal and the clearing price is equal to P^{C} . The right panel then represents the auction outcome when supplier S instead submits a higher-priced

bid above its true cost of supplying capacity, in an attempt to exercise market power. In this case, supplier S's higher-priced bid is not selected to sell capacity, and the clearing price increases to P^{MP} .

Observe, using Figure 4, that where the supply curve is relatively flat, the price increase from P^C to P^{MP} is more modest because the capacity that is now marginal (price-setting) in the right panel is only slightly more expensive than the de-list bid that sets the clearing price in the competitive case, at P^C . Thus, the exercise of market power is less costly to consumers than when the supply curve is steeper, since the price increase is more modest. Moreover, the efficiency losses are lower since the cost of the supply that replaces supplier S is not significantly higher.

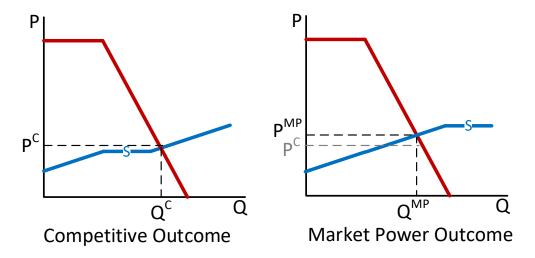


Figure 4: Non-competitive bidding by Supplier S with a shallow supply curve

Note that the resulting price increase (from P^C to P^{MP}) may not offset the foregone revenue to supplier S resulting from its withheld capacity, which (in the right

panel) receives no capacity revenue at all. As a result, the incremental profit to the supplier from withholding when the supply curve is flat may be zero or negative. For that reason, market conditions where the supply curve tends to be flat can be sufficient to discipline attempts to increase the capacity price by offering capacity noncompetitively (even absent direct administrative mitigation rules).

Q:

A:

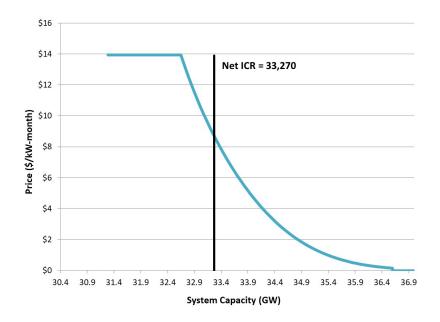
What market conditions tend to align with flatter or steeper supply curves?

Generally, we expect the capacity supply curve to be "flatter" at lower capacity prices, where there is likely to be a large quantity of capacity that has modest going forward costs, and therefore submit similarly priced bids. More specifically, in this range, resources have low (or zero) going forward costs, and so the costs of supplying capacity tend to be dominated by the "common value component" that is similar for all capacity suppliers (as discussed earlier). Thus, when the common value component is the primary driver of bid prices, as occurs at lower prices, we expect that the supply curve will be relatively flat.

As the market moves toward higher prices, the supply curve is likely to steepen, as resources that reside farther "up" the aggregate supply curve need to also reflect a larger "resource-specific component" to their costs for providing capacity, which can be highly variable (due to a resource's age, operating performance, and other resource-specific factors).

1	Q:	What market conditions tend to align with flatter or steeper demand curves?
2	A:	The capacity demand curve is administratively determined based on capacity's
3		estimated Marginal Reliability Impact ("MRI") value at each capacity quantity.
4		Across all studies and auctions run under this MRI-based methodology to date,
5		the ISO has found that at prices below the auction starting price, this demand
6		curve is steep at high prices, indicating that the change in the MRI value of
7		capacity decreases quickly as incremental capacity is added. The demand curve
8		then becomes flatter as prices decrease, indicating that the rate of decrease in the
9		MRI value lessens as incremental capacity continues to be added. This
10		phenomenon is illustrated in Figure 5 below, which is the ISO's proposed system-
11		wide capacity demand curve for FCA 15 that was filed with the Commission in
12		November 2020. ¹³
13		

¹³ ISO New England Inc. and New England Power Pool Participants Committee, Filing of Installed Capacity Requirement, Hydro Quebec Interconnection Capability Credits and Related Values for the Fifteenth FCA (Associated with the 2024-2025 Capacity Commitment Period), Docket No. ER21- 371-000 (filed November 10, 2020).



1 2

Figure 5: The system-wide capacity demand curve for FCA 15

Q:

Does the ISO's approach balance the design objectives differently depending on market conditions?

Yes. Generally, the new design will place greater weight on design objective 1 during market conditions where we expect the supply and demand curves to be relatively steep, and thus when the exercise of supplier-side market power is of greater concern. As explained above, this concern is of greatest significance when the capacity price is higher.

Conversely, during market conditions where the competitive clearing price is expected to be in a range where the supply and demand curves tend to be flatter, the design places greater weight on design objective 2, which seeks to minimize administrative interference in competitively-based bidding. As explained above, these conditions are more likely to occur when the capacity price is lower.

demand curve for the next FCA).

most up-to-date projected demand conditions (using the estimated system-wide

24

A:

Q: Does the DDBT recalibration method produce a reasonable estimate of the next FCA's competitive clearing price?

We will focus on the calculation of the "preliminary" DDBT value in response here, and address this question with relation to the limits and adjustments further below. The core calculation in the DDBT recalibration method estimates the competitive clearing price for the next FCA based on three publicly-known inputs: (1) the total quantity of capacity that cleared (*i.e.*, acquired a Capacity Supply Obligation) in the last FCA, (2) the system-wide capacity clearing price in the last FCA, and (3) the projected change in demand for the next FCA. The concept underlying the method is to observe the actual market conditions (in the last FCA) and estimate how the intersection of supply and demand may change for the next FCA, considering the projected change in demand and assuming (reasonably) that the market supply curve will have an upward slope.

Conceptually, there are two reasons this calculation is expected to produce a reasonable estimate of the next auction's competitive clearing price. First, the *direction* of the change in the auction clearing price from year-to-year can be expected to relate directly to the change in auction demand. That is, when demand *decreases* we can reasonably expected the competitive clearing price to decrease (to some degree), and vice versa. The simple average (using the two input prices described above) produces results consistent with these expected changes in the clearing price.

1 2 Second, the *magnitude* of the expected change in the auction-clearing price should 3 relate to how significantly the auction demand changed from year-to-year. More 4 specifically, when demand *increases significantly* we generally expect the market-5 clearing quantity and competitive clearing price to increase significantly. 6 However, when demand *increases modestly* the expected increases in the market-7 clearing quantity and competitive clearing price would be comparatively smaller. 8 These same general observations regarding the magnitude of the expected change 9 in the clearing price apply to cases where demand is instead decreasing. Thus, 10 there is an intuitive simplicity and symmetry to the logic of the DDBT 11 recalibration method. 12 13 Can you provide a simple example to illustrate the result of the recalibration Q: 14 method in a scenario where demand is decreasing from the prior year? 15 A: Yes, the example shown in Figure 6 below is a case where the next FCA's 16 demand (D_t) decreases from the last FCA's demand (D_{t-1}) and the new 17 recalibration method sets the DDBT for the next FCA (denoted in the figure as 18 DDBT*_t) to a *lower* price level. The value DDBT*_t is calculated as the simple

19

20

21

supply quantity (Q_{t-1}) .

average of (1) the last FCA's clearing price (P_{t-1}), and (2) the (lower) price on the

next FCA's estimated demand curve (Dt) evaluated at the last FCA's cleared

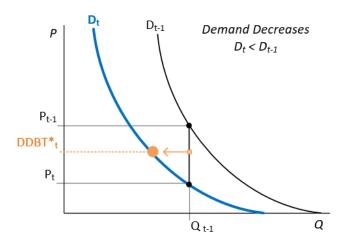


Figure 6: Example of the DDBT recalibration method with decreasing demand

Figure 6 also helps illustrate the purpose of averaging the two prices, P_{t-1} and P_t . Doing so avoids an estimate of the next FCA price that may be unrealistically high or low when demand is decreasing. The average provides an estimate of the next FCA's competitive clearing price (DDBT* $_t$) that recognizes the supply curve for the upcoming auction is unlikely to be horizontal at the last auction's clearing price (P_{t-1}) and is unlikely to be vertical at the last auction's cleared quantity (Q_{t-1}).

Instead, the average provides an estimate of the next FCA's competitive clearing price that reflects the reasonable assumption that the supply curve in the FCA is upward sloping (i.e., somewhere in between horizontal and vertical) over the relevant region range of supply (the intersections of supply and demand) indicated by P_{t-1} and $DDBT^*_t$ in Figure 6. Conceptually, this can be interpreted by imagining an upward sloping line, representing the relevant section of the supply curve, that connects the points $DDBT^*_t$ and P_{t-1} in Figure 6.

Q: Can you provide a simple example to illustrate the result of the recalibration method in a scenario where demand is *increasing* from the prior year? A: Yes, the example shown in Figure 7 below is a case where the next FCA's demand (D_t) increases from the last FCA's demand (D_{t-1}) and the new recalibration method will set the preliminary DDBT for the next FCA (again denoted by DDBT*_t) to a *higher* price level. As with the prior example, the value DDBT $*_t$ is calculated using the average of (1) the last FCA's clearing price (P_{t-1}), and (2) the (higher) price on the next FCA's estimated demand curve (D_t) 10 evaluated at the last FCA's cleared supply quantity (Q_{t-1}) .

1

2

3

4

5

6

7

8

9

11

12

13

14

15

16

17

18

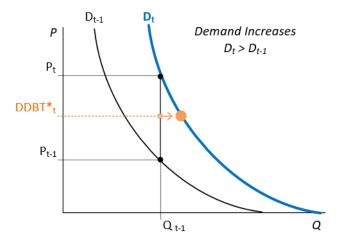


Figure 7: Example of the DDBT recalibration method with increasing demand

As with the prior example, Figure 7 helps to illustrate the purpose of averaging the two prices, P_{t-1} and P_t: Doing so avoids an estimate of the next FCA price that may be unrealistically low or high when demand in increasing. As demand increases the supply curve is unlikely to be horizontal at the last clearing price (P_{t-1}) and is unlikely to be vertical at the last cleared quantity (Q_{t-1}) .

1 2 Instead, the average provides an estimate of the next FCA's competitive clearing 3 price that reflects the reasonable assumption that the supply curve in the FCA is 4 upward sloping over the relevant range of supply (the intersections of supply and 5 demand) indicated by P_{t-1} and DDBT*_t in Figure 7. Again, conceptually, this can 6 be interpreted by imagining an upward sloping line, representing the relevant 7 section of the supply curve, that connect the points P_{t-1} and DDBT*_t in Figure 7. 8 9 Q: Why does the recalibration methodology use the average of the clearing price 10 from the last FCA and the price of demand at the last FCA supply quantity, 11 rather than simply using the price from the updated demand curve? 12 A: The average is an important feature of the new DDBT recalibration methodology. 13 As the examples above show, simply using the price on the next FCA's estimated 14 demand curve ("P_{t-1}") would assume that the market supply curve for the next 15 FCA is vertical at the last FCA's cleared supply quantity. In other words, this 16 would assume that all suppliers that sold their capacity in the last FCA will offer 17 as price-takers in the next FCA and that there is no change in the amount of 18 capacity procured in the next FCA as demand either increases or decreases. 19 20 That is not a realistic assumption, in theory or in practice. As we explained 21 previously, utilizing the average of the two prices provides estimates of the

change in the next FCA clearing price that are consistent with an upward sloping

supply curve and, correspondingly, with assuming the total amount of capacity

22

1		that will be acquired in the FCA will be responsive to changes in the capacity
2		demand curve.
3		
4	Q:	Does the recalibration method reflect any other potential supply changes
5		from one auction to the next, such as directly estimating changes to
6		resources' de-list bid prices or new capacity supply offers?
7	A:	No, the recalibration methodology does not attempt to estimate changes in the
8		specifics of the market supply curve from one auction to the next, or any other
9		potential changes in supply between auctions. Suppliers' final delist-bid and offer
10		prices (for existing and new capacity, respectively) are not formulated until after
11		the DDBT is calculated, and thus the ISO would not have any informative
12		resource-level supply data before the DDBT must be set for the upcoming FCA.
13		
14	Q:	How often is the DDBT value recalculated with the recalibration method?
15	A:	The DDBT will be recalculated annually, so that an updated DDBT value can be
16		applied to each annual FCA.
17		
18	Q:	Why is the ISO proposing to recalculate the DDBT annually for each FCA?
19	A:	Updating the DDBT value annually is a key reason why the DDBT recalibration
20		method is a significant improvement over the prior (manual estimation) method.
21		The annual recalibration will help to prevent the DDBT from becoming "stale" by
22		ensuring that the DDBT value remains aligned with current market conditions, as
23		observed in the last FCA and with the expected change in demand conditions for

the next FCA (*i.e.*, observed from the next FCA's projected demand curve). The annual recalibration of the DDBT is expected to significantly improve the accuracy of the DDBT value as an estimate of the competitive clearing price for the FCA in which the DDBT will be utilized, which is important to achieving the DDBT's design objectives.

B. Relating the new DDBT calculation method to the design objectives

A:

Q: Has the ISO evaluated the performance of the new DDBT recalibration

method?

Yes. Recall from Section III that the method should generally aim to set the DDBT at a target equal to the next auction's competitive clearing price. To evaluate the new DDBT recalibration method, we conducted an empirical analysis that compares how close the DDBT would have been to the actual FCA capacity clearing prices in the last six auctions, if the new DDBT recalibration method had been in place historically. That analysis, which is discussed in more detail in Section VII, was particularly important for evaluating the effectiveness of the new DDBT recalibration method in meeting its design objectives.

Moreover, that analysis examined not only the performance of the new DDBT recalibration method, but also the performance of the actual (manual estimation method) DDBT values that were used in those prior auctions. This enabled us to directly compare the performance of the new DDBT recalibration method with that of the prior method that the new design seeks to improve upon.

1	Q:	What does this analysis show regarding the efficacy of the new method in
2		setting a DDBT that approximates the competitive clearing price?
3	A:	When applied to prior auctions, the new DDBT recalibration method performs
4		well in setting the DDBT to a value that is close to the realized clearing price for
5		each FCA. More specifically, the DDBT that would have been set for these past
6		auctions using the new method differs from the auction's actual clearing price by
7		an average of 26 percent, as measured using the absolute value of the estimation
8		error. Importantly, this performance is better than was observed for the actual
9		DDBT values that were set using the manual estimation method for those prior
10		auctions; the mean absolute value of the estimation error for the actual DDBT
11		values was higher, at 39 percent.
12		
13		This analysis therefore indicates that the new DDBT recalibration method is
14		likely to produce DDBT values that are, on average, a better estimate of the
15		competitive clearing price than the manual estimation method that has been
16		applied for the prior six FCAs.
17		
18	Q:	What does this analysis indicate about the new DDBT recalibration method's
19		performance with respect to the first two design objectives?
20	A:	The analysis suggests that the new DDBT recalibration method will improve the
21		accuracy of the DDBT as an estimate of the auction's competitive clearing price.
22		Because it more accurately estimates the auction's clearing price, it is less likely
23		to produce values that would dramatically underestimate or overestimate the FCA

1 clearing price under competitive market conditions. For this reason, we expect 2 the new method to better achieve design objectives 1 and 2. 3 4 More specifically, to the extent that the new DDBT recalibration method is less 5 likely to significantly overestimate the competitive clearing price (i.e., by setting 6 the DDBT too high), it will reduce the potential for the exercise of supplier-side 7 market power, as suppliers will be unable to increase capacity de-list bid prices in 8 a manner that would increase the auction clearing price above the competitive 9 level. 10 11 Similarly, to the extent that the new DDBT calculation method is less likely to 12 significantly *underestimate* the competitive clearing price (i.e., by setting the 13 DDBT too low), it will decrease the unnecessary administrative burden for 14 suppliers with de-list bids that, at the supplier's preferred price, would not 15 increase the FCA's clearing price above the competitive level. 16 17 Q: How does the new DDBT recalibration method perform with respect to the 18 third design objective? 19 The new DDBT recalibration method uses (only) publicly-available inputs and A: 20 employs a transparent calculation to set the DDBT. This represents a marked 21 improvement over the prior manual estimation method, which relied upon 22 resource-specific, non-public de-list bid price data that cannot be shared with, or 23 vetted by stakeholders, to calculate the DDBT.

1 2 Additionally, the new design is robust to changes in market conditions because 3 the DDBT value will be updated each year to reflect the most up-to-date supply 4 and demand conditions. This is a significant improvement relative to the past 5 approach of calculating the value approximately once every three years. 6 7 Based on these observations, the new DDBT recalibration method fully satisfies 8 design objective 3, whereas the prior method is unable to achieve that objective 9 for the reasons described earlier in this testimony (see Section IV). As we have 10 explained, attempting to develop a DDBT method that achieves design objective 3 11 was a goal that the ISO established to improve upon the limitations of the prior 12 manual estimation method. 13 14 In summary, the ISO, with the support of the region's stakeholders, was able to 15 develop a new DDBT calculation method that better accomplishes all three of the 16 design objectives, relative to the prior manual estimation method. 17 C. **Explanation of data inputs and demand curve estimation mechanics** 18 employed for calculating the DDBT value 19 20 21 Q: When will the DDBT recalculation take place for each FCA cycle? 22 A: The DDBT will be calculated in March of each year. This timing allows the ISO 23 to use the results of the last FCA, which will have taken place in February, and 24 complete the DDBT calculation before the first relevant deadlines of the next

FCA qualification process that utilize the DDBT value. Specifically, the Tariff

requires publishing the DDBT by the fifth business day prior to the Existing

Capacity Retirement Deadline, which usually falls in the second week of March.

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

Q:

A:

1

2

Why is it necessary to use an estimate of the next FCA's demand curve for the DDBT calculation?

As noted previously, the DDBT value is needed in March of the year prior to the FCA for the pre-auction de-list bid review process. However, the demand curve for the FCA is not finalized until later in the year, as the auction demand curves are reliant on various other market parameters; in particular, the Installed Capacity Requirement ("ICR"). The region's Installed Capacity Requirement (net of Hydro-Quebec Interconnection Capability Credits) (Net Installed Capacity Requirement, or "Net ICR") and the associated MRI values define the quantity dimension of the FCA's system-wide demand curve. Changes in the Net ICR value will shift the system-wide demand curve left or right as Net ICR increases or decreases, respectively. The Net ICR value, as well as the MRI values and resulting FCA demand curves, are developed annually during the year prior to the auction and are not finalized and filed with the Commission until November (i.e., late in the pre-auction qualification process and approximately eight months after the DDBT value is needed at the start of the qualification process). Therefore, an estimate of the next FCA's demand curve is used in the DDBT recalibration method.

() :	How	will	the	estima	ted F	CA	demand	curve	he	calci	ılate	ed'	?
•	<i>,</i> .	440 W	***		Country	icu i	\sim	uciliuliu	Cui IC	\mathbf{v}	cuici	uuu	Ju 1	

A: To support the DDBT recalibration calculation, the ISO will calculate and publish an estimate of the Net ICR value for the next FCA in March using the most-recent load forecast data and other assumptions from the ICR study for the last FCA.

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

1

2

3

4

An estimate of the downward sloping system-wide demand curve will be developed using the method that is employed for calculating the FCA demand curves, as prescribed in Section III.13.2.2.1 of the FCM rules. Section III.13.2.2.1 requires that the System-Wide Capacity Demand Curve "shall specify a price for system capacity quantities based on the product of the system-wide MRI value, calculated pursuant to Section III.12.1.1, and the scaling factor specified in Section III.13.2.2.4." Section III.12.1.1, in turn, requires that the system-wide MRI value of incremental capacity at various capacity levels be calculated using "the same modeling assumptions and methodology used in determining the Installed Capacity Requirement." Section III.13.2.2.4 requires that the demand curve scaling factor "be set at the value such that, at the quantity specified by the System-Wide Capacity Demand Curve at a price of Net CONE, the Loss of Load Expectation is 0.1 days per year." These calculations are explained in detail in each year's filing of the FCA demand curves, the ICR, and other related values, which takes place in November for the following year's FCA pursuant to Section III.12.3 of the Tariff.

For purposes of constructing the projected demand curve for the next FCA for the DDBT calculation, it is important to underscore that the demand curve calculation is transparent and in accordance with the existing Tariff requirements for establishing the FCA demand curves. Furthermore, the values used to calculate the projected demand curve are also publicly available at the time that the DDBT value must be calculated and posted. These values include (1) an estimate of the Net ICR value for the next FCA, which will be calculated in accordance with the ICR calculation requirements in Section III.12 of the Tariff and published at the time the calculated DDBT value is publicly posted, (2) the system-wide MRI values calculated for the last FCA; (3) the Net CONE value for the next FCA; and (4) the FCA Starting Price for the next FCA.

Q:

A:

While the Net ICR estimate, the Net CONE value and the FCA Starting Price are all calculated for the next FCA for which the DDBT is being calculated, the system-wide Marginal Reliability Impact values are from the prior FCA. Please explain why the use of the last auction's Marginal Reliability Impact values is appropriate for estimating the next FCA demand curve?

As we noted previously, the MRI values for the FCA are not finalized and filed with the Commission (as part of the ICR study) until November. Therefore it is necessary to use an estimate of the upcoming FCA's MRI values. Due to the close relationship between the study models for the Net ICR and for the MRI values, the MRI values at each level of capacity above and below the Net ICR value remain stable from auction-to-action, regardless of the value of the Net ICR.

1		That is, at any quantity relative to the Net ICR (say, Net ICR minus 520 MW), the
2		MRI value is very similar regardless of whether the Net ICR is 33,000 MW or
3		34,000 MW (as an example). Because of this, it is possible to use the MRI values
4		from the last FCA and achieve an accurate estimate of the MRI values for the next
5		FCA values. In addition, the last FCA's MRI values are publicly available at the
6		time that the new DDBT value must be calculated.
7		
8	Q:	Turning to the remaining inputs in the DDBT calculation, what clearing
9		price from the last FCA is used for the calculation?
10	A:	The relevant clearing price from the last FCA for the new DDBT recalibration
11		method is the capacity clearing price for the Rest-of-Pool capacity zone. This
12		clearing price generally corresponds with the intersection of the prior auction's
13		total system capacity supply curve and the prior auction's System-Wide Capacity
14		Demand Curve. Since the DDBT is a system-level parameter, it is appropriate to
15		use the system-level capacity clearing price.
16		
17		It is possible, under the rules detailed in Section III.13.2.5.2.1(d) for the FCM,
18		that the primary auction of the FCA would be re-run due to the rules pertaining to
19		Proxy De-List Bids. If this had occurred in the last FCA, then the DDBT
20		calculation for the next FCA would use the clearing price for the Rest-of-Pool
21		capacity zone determined in that second run of the primary auction. If the FCA is
22		re-run to account for Proxy De-List Bids, the second run auction provides the

1		most recent auction-clearing price that aligns with the final cleared capacity for
2		the last FCA.
3		
4	Q:	What quantity of cleared capacity from the last FCA is used in the DDBT
5		calculation for the next FCA?
6	A:	The relevant quantity of capacity from the last FCA is the system's total capacity
7		that cleared (i.e., sold capacity) in the last FCA. Specifically, this is the aggregate
8		amount of Capacity Supply Obligation ("CSO") awards for summer months at the
9		conclusion of the last FCA process (i.e., including the substitution auction and
10		any re-run of the primary auction, as applicable). The DDBT calculation will use
11		the total CSO quantity (in MW) for summer months because this is the capacity
12		amount that aligns with the Rest-of-Pool capacity clearing price. In contrast, the
13		total CSO amounts for winter months reflect special post-auction adjustments,
14		relating mainly to Intermittent Power Resources' capability under winter
15		conditions that do not align with the FCA's clearing price.
16 17		D. Adjustments to the preliminary DDBT value
18 19	Q:	You note above that the new DDBT recalibration method involves certain
20		adjustments to the preliminary DDBT value to determine the final DDBT
21		value. Please describe these adjustments.
22	A:	The recalibration method includes both a maximum limit and a minimum limit on
23		the value of the DDBT. These limits are included to constrain the resulting
24		DDBT value to a reasonable range and slow an abrupt shift that could arise from
25		the simple average used to create the preliminary DDBT value. More

1 specifically, using the limits helps address the concern that the simple averaging 2 approach may overstate the change in the competitive clearing price when there is 3 a significant change in the auction demand. Further, these limits help the design 4 to reflect a desired balance of design objectives 1 and 2 in specific market 5 conditions, as discussed in Section V, and as preferred by the region's stakeholders. 6 7 8 Moreover, the application of these limits, along with a "margin" (discussed 9 further below), allow the new recalibration method to produce a final DDBT 10 value that more accurately approximates the auction's clearing price when 11 evaluated over the past six auctions. That empirical evaluation of the effects of 12 the limits and margin is discussed within Section VII of this testimony. 13 14 Please explain the maximum limit on the DDBT value. Q: 15 A: The maximum limit prevents the DDBT value for the next FCA from rising to a value that is more than 75 percent of the Net CONE for the next FCA. 16 17 18 What is the purpose of the *maximum* limit? Q: 19 The maximum limit is relevant in market conditions where capacity prices are A: 20 expected to be higher, and the simple average technique specifies a price that 21 approaches or exceeds the market's Net CONE value.

This maximum limit reflects the fact that at higher prices, both the supply and demand curves tend to become steeper (more inelastic). Recall from our discussion in in Section V (and related Figures 3 and 4) that as these curves become steeper, the potential for supplier-side market power and its deleterious effects on consumer costs and market efficiency become greater. Thus, the application of this maximum limit serves to reduce the likelihood that the DDBT is set above the competitive clearing price, and as a result, consistent with design objective 1, it helps to prevent exercises of market power when the risk and impact of an exercise of market power is likely to be greatest.

A:

Q: Why is 75 percent of the Net CONE value for the next FCA used to set the

limit?

Using 75 percent of Net CONE strikes a reasonable balance where this limit is only applied during periods where the clearing price is expected to approach the Net CONE value. It is under such conditions that concerns about market power are most acute, and it is therefore appropriate to place a greater emphasis on preventing market power. At lower prices, where the maximum limit does not impact the DDBT value, concerns about the exercise of market power are less acute, and the design therefore does not include any other downward adjustment to the DDBT value.

1	Ų:	riease explain the minimum value limit on the DDb1 value.
2	A:	The minimum limitation prevents the DDBT value for the next FCA from being
3		below a value that is less than 75 percent of the last FCA clearing price.
4		
5	Q:	What is the purpose of the minimum limit?
6	A:	The minimum limit is relevant when there is a significant year-to-year reduction
7		in demand (i.e., due to reductions to the Net ICR and/or the Net CONE value) and
8		will prevent the DDBT value from falling well below the prior FCA's clearing
9		price.
10		
11		This limit seeks to serve two purposes. First, it reflects the fact that the supply
12		curve tends to become flatter (more elastic) as quantity decreases (moving
13		leftward), which is consistent with the observations in Section V earlier in this
14		testimony regarding the shapes of the supply and demand curves at lower prices.
15		Mechanically, flatter supply and demand curves will tend to limit the decrease in
16		the clearing price even with a large reduction in demand, and the application of a
17		minimum limit is consistent with this expectation.
18		
19		Second, as was also discussed earlier in Section V, it is sensible to consider the
20		market conditions when the minimum limit would be relevant, and to consider
21		their implications regarding the likelihood and consequences of supplier-side
22		market power. During conditions when prices are expected to be low, suppliers
23		are less likely to be able to exercise market power, and even in such cases, the

1		deleterious effects on consumer costs and market efficiency are lower than under
2		other market conditions. As a result, it is sensible to apply such a minimum value
3		in order to provide greater emphasis on avoiding unnecessary administrative
4		costs, consistent with design objective 2.
5		
6	Q:	Please explain how the design addresses a potential scenario when the
7		minimum limit would exceed the maximum limit.
8	A:	In a scenario where the minimum (i.e., at 75% of the last FCA clearing price) is
9		higher than the maximum (i.e., at 75% of the Net CONE value for the next FCA),
10		then the maximum limit will take precedence such that the preliminary DDBT
11		will be capped at 75% of Net CONE.
12		
12		
13	Q:	Please explain the DDBT "margin" concept that you noted earlier, at the
	Q:	Please explain the DDBT "margin" concept that you noted earlier, at the outset of this section of the testimony.
13	Q: A:	
13 14		outset of this section of the testimony.
13 14 15		outset of this section of the testimony. At a high-level, the DDBT recalibration method includes an additional adjustment
13 14 15 16		outset of this section of the testimony. At a high-level, the DDBT recalibration method includes an additional adjustment to the preliminary DDBT value, after applying the minimum and maximum limits
13 14 15 16 17		outset of this section of the testimony. At a high-level, the DDBT recalibration method includes an additional adjustment to the preliminary DDBT value, after applying the minimum and maximum limits described above. We refer to this adjustment as a margin and it functions to
13 14 15 16 17 18		outset of this section of the testimony. At a high-level, the DDBT recalibration method includes an additional adjustment to the preliminary DDBT value, after applying the minimum and maximum limits described above. We refer to this adjustment as a margin and it functions to
13 14 15 16 17 18 19	A:	outset of this section of the testimony. At a high-level, the DDBT recalibration method includes an additional adjustment to the preliminary DDBT value, after applying the minimum and maximum limits described above. We refer to this adjustment as a margin and it functions to increase the final DDBT value in a graduated, price-dependent manner.
13 14 15 16 17 18 19 20	A:	outset of this section of the testimony. At a high-level, the DDBT recalibration method includes an additional adjustment to the preliminary DDBT value, after applying the minimum and maximum limits described above. We refer to this adjustment as a margin and it functions to increase the final DDBT value in a graduated, price-dependent manner. Please explain how this margin is calculated and incorporated into the final

applying the minimum and maximum limits described above). By construction, this ratio will be between zero and one. The ratio value is multiplied by \$1/kW-month to determine the dollar value of the margin. By design, the ratio (and thus the margin value) will *increase as the preliminary DDBT value decreases*, and will *decrease as the preliminary DDBT value increases*. The margin value will be *zero* when the preliminary DDBT is at the maximum limit (*i.e.*, at 75 percent of Net CONE for the next FCA).

More detail on the formula used to calculate the margin, as well as what this margin would have been if the new DDBT recalibration method had applied in prior auctions, is provided later in Table 2 of Section VII of this testimony.

Q:

A:

What is the purpose of the margin value?

Consistent with both the maximum and minimum limits, the margin seeks to reflect that the potential for market power, and its deleterious effects on consumer costs and market efficiency, are likely to be greater as market conditions become tighter and expected clearing prices are higher. These concerns are less acute when the market is in surplus conditions and capacity prices are lower.

The margin allows the final DDBT value to better account for this dynamic, as the margin value itself is inversely related to the expected capacity clearing price.

More specifically, when the FCA clearing price is expected to be higher, the margin declines toward zero (it reaches zero if the preliminary DDBT is set at a

price of 75% of Net CONE). Under such conditions, market power is of greater concern, and margin's minimal impact appropriately reflects the fact that the design should place additional weight on preventing the exercise of market power in those conditions.

When the system has excess supply conditions, and the clearing price is expected to be lower, the margin will be larger, thereby increasing the final DDBT value. This outcome reflects that under such system conditions, the potential for and deleterious effects of market power are likely to be lower, and it is therefore reasonable to place greater weight on avoiding unnecessary administrative requirements and the potential for interference with competitive bidding.

VII. ANALYSIS OF THE NEW DDBT CALCULATION METHOD

Q: Please summarize the ISO's quantitative evaluation of the accuracy of the DDBT recalibration method.

As discussed previously in Section VI.B of this testimony, we performed an analysis of the DDBT recalibration method to evaluate how this new method would have performed in recent auctions. The objective of this analysis was to evaluate the robustness of the new DDBT recalibration method, that is, whether it would support the conclusion that the new methodology produces DDBT values that better estimate the FCA's competitive clearing prices and are appropriately responsive to changing market conditions over time.

Specifically, the ISO analyzed the performance of the recalibration method beginning with FCA 9 (held in February 2015 for the 2018-2019 period), when a system-wide sloped demand curve was first introduced, and continuing through FCA 14 (held in February 2020 for the 2023-2024 period). This provided a series of six auctions with which we could evaluate the performance of the new DDBT recalibration method.

Q:

A:

How was the analysis performed?

For each of these six auctions, we collected the market data inputs (which are all from public sources) that would be needed for the DDBT recalibration method and applied the new formula as if recalibration had been used to calculate the DDBT for each historical FCA. The only notable difference in the development of the inputs was the estimate of the change in demand. To build the estimated demand curve for each of the prior auctions, we did not have a representative approximation for the estimated Net ICR value, and so the actual Net ICR for the auction was used instead. As described in further detail below, this analysis applied the maximum and minimum limits, and the margin value, to calculate the final DDBT values corresponding to the new method.

0:

A:

What were the results of the analysis?

The results demonstrate that, on average, the recalibration method produced more accurate *ex ante* estimates of the FCA clearing prices than the actual DDBT

values (from the manual estimation method) that were used in the six prior auctions.

A summary of the analysis results demonstrating the improved accuracy of the new DDBT recalibration method is shown in Table 1 below.

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
FCA	FCA Clearing Price	Actual DDBT	Actual DDBT Error (\$/kW-month)	Actual DDBT Abs. Percent Error	Recal. DDBT	Recal. DDBT Error (\$/kW-month)	Recal. DDBT Abs. Percent Error
			=B-A	=/(B-A)/A/		=E-A	=/(E-A)/A/
FCA 9	\$9.55	\$3.94	(\$5.61)	59%	\$8.31	(\$1.24)	13%
FCA 10	\$7.03	\$5.50	(\$1.53)	22%	\$8.11	\$1.08	15%
FCA 11	\$5.30	\$5.50	\$0.20	4%	\$6.97	\$1.67	31%
FCA 12	\$4.63	\$5.50	\$0.87	19%	\$4.32	(\$0.31)	7%
FCA 13	\$3.80	\$4.30	\$0.50	13%	\$4.57	\$0.77	20%
FCA 14	\$2.00	\$4.30	\$2.30	115%	\$3.39	\$1.39	69%
Average				39%			26%

Table 1: Performance of the actual and new recalibration DDBT values

In Table 1, the absolute value of the percent error (columns D and G) show the estimation error in percentage values for the actual DDBT (column D) and for the hypothetical DDBT value calculated using the new DDBT recalibration method (column G). As shown in the summary average results in the final row of Table 1, the estimation error is lower (26%) when applying the new DDBT recalibration method than the estimation error with the actual DDBT values (39%). Evaluating these results using the absolute value of the error is informative because, as we

have explained, the design seeks to set the DDBT at (or close to) the competitive clearing price and, therefore, there is concern with errors both above and below the target level.

The columns (C) and (F) in Table 1 provide the respective estimation error values for the new DDBT recalibration method and actual DDBT values in dollar terms (*i.e.*, \$ per kW-month). It is not particularly meaningful to average these values since an average does not provide a reference for the direction or magnitude of the error in each FCA or over a period of auctions. However, the individual auction measures help for understanding the direction and magnitude when presented alongside the absolute percent error measures described previously.

The data in Table 1 indicate that the new DDBT recalibration method has a smaller error than the prior manual estimation method in four of the last six auctions (*i.e.*, FCAs 9, 10, 12, and 14) including the auctions with the highest and lowest clearing price in the sample (FCA 9 and FCA 14, respectively). This supports the conclusion that the new method is better able to estimate the FCA's competitive clearing price under the broad range of market conditions that we observe in the historical auctions.

Q: Did the analysis that you performed to create these summary statistics also provide details of the calculation steps for the recalibration method?

Yes. As we described above, to perform the analysis we collected all the necessary inputs and conducted the calculation as if we were preparing the DDBT for each FCA using the new method. Therefore, we needed to input and emulate each step in the calculation process for the new recalibration method.

A:

A summary of each intermediate value and calculation step for the six auctions in our analysis is presented in Table 2.

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
FCA	Prior FCA Clearing Price	Demand Price at Prior CSO	Initial Prelim. DDBT	DDBT Min. Limit	DDBT Max. Limit	Second Prelim. DDBT	Margin Value	Final Recal. DDBT
	$("P_{t-1}")$	("P _t ")	=(A+B)/2	$=75\% x$ P_{t-1}	=75% x Net CONE	$=min\{E, \\ max(C,D)\}$	= \$1 x $(E-F)/E$	=F+G
FCA 9	\$15.00	\$15.09	\$15.04	\$11.25	\$8.31	\$8.31	\$0.00	\$8.31
FCA 10	\$9.55	\$10.25	\$9.90	\$7.16	\$8.11	\$8.11	\$0.00	\$8.11
FCA 11	\$7.03	\$6.46	\$6.74	\$5.27	\$8.73	\$6.74	\$0.23	\$6.97
FCA 12	\$5.30	\$0.25	\$2.78	\$3.98	\$6.03	\$3.98	\$0.34	\$4.32
FCA 13	\$4.63	\$3.92	\$4.27	\$3.47	\$6.12	\$4.27	\$0.30	\$4.57
FCA 14	\$3.80	\$0.64	\$2.22	\$2.85	\$6.14	\$2.85	\$0.54	\$3.39

 Table 2: Recalibration calculations, limits, and margin values

To read Table 2 in a way that reflects the new method's calculations, consider the values in columns (A) through (H) proceeding left to right. Columns (A) and (B) are the inputs to the simple average of the last and next FCA price value, as described in Section VI.C. That simple average value (*i.e.*, the initial

"preliminary DDBT") is reported in column (C). Columns (D) and (E) present the minimum and maximum limits, described earlier in Section VI.D. The second preliminary DDBT value that results after applying the minimum and maximum limits is reported in column (F). The margin value, also described in Section VI.D, is presented in column (G). Finally, column (H) shows the final value of the DDBT resulting from the recalibration method, which is the sum of the second preliminary DDBT with the limits applied in column (F), and the margin value in column (G). The final DDBT values in column (H) of Table 2 are the same DDBT values shown previously in column (E) of Table 1. Is it possible that the application of the limits and the margin reduce the new method's efficacy in producing a DDBT value that approximates the FCA's competitive clearing price? Yes. Not only is this possible, but the limits and margin increased the estimation error for three out of the six historical auctions studied here. This effect can be observed by comparing the estimation error for the initial preliminary DDBT value (without the limits or adjustments) against the estimation error for the final DDBT value resulting from the recalibration method as is shown in Table 3 below.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

O:

A:

	(A)	(B)	(C)	(D)	(E)	(F)	(G)
FCA	FCA Clearing Price	Initial Prelim DDBT	Initial Prelim DDBT Error (\$/kW-month) =B-A	Initial Prelim DDBT Abs. Percent Error =/(B-A)/A/	Recal. DDBT	Recal. DDBT Error (\$/kW-month) =E-A	Recal. DDBT Abs. Percent Error =/(E-A)/A/
FCA 9	\$9.55	\$15.04	\$5.49	57%	\$8.31	(\$1.24)	13%
FCA 10	\$7.03	\$9.90	\$2.87	41%	\$8.11	\$1.08	<u>15%</u>
FCA 11	\$5.30	\$6.74	\$1.44	<u>27%</u>	\$6.97	\$1.67	31%
FCA 12	\$4.63	\$2.78	(\$1.85)	40%	\$4.32	(\$0.31)	<u>7%</u>
FCA 13	\$3.80	\$4.27	\$0.47	<u>12%</u>	\$4.57	\$0.77	20%
FCA 14	\$2.00	\$2.22	\$0.22	<u>11%</u>	\$3.39	\$1.39	69%
Average				31%			26%

Table 3: Performance of preliminary and final recalibration DDBT values

1 2

In Table 3, the preliminary DDBT value without either limit or the margin is shown in column (B), and the final DDBT value with both limits and the margin value applied is shown in column (E). Observe that in three of the six auctions (*i.e.*, FCAs 11, 13 and 14), the inclusion of limits and the margin caused the final DDBT value to be set further from the FCA clearing price, relative to the initial preliminary DDBT estimate obtained from the simple two-price average discussed in Section VI.A of this testimony. In the other three auctions (*i.e.*, FCAs 9, 10, and 12), the limits and margin *increased* the accuracy of the final DDBT. These differences in accuracy can be observed by comparing the values in columns (D) and (G) in Table 3; in these columns we underlined to indicate which of these two observations has the lower absolute percent error for each FCA.

Overall, though, the bottom row summary values in Table 3 demonstrate that, on average across all six auctions, the application of the limits and margin actually *reduces* the absolute percent error from 31 percent to 26 percent. This suggests that the inclusion of these adjustments to develop the final DDBT value may better allow the new method to produce DDBT values that approximate the competitive clearing price over a range of market conditions.

Moreover, recall that the inclusion of the limits and margin is intended to serve a second important purpose, beyond simply seeking to set the DDBT at or close to the competitive clearing price. More specifically, these adjustments allow the new method to more appropriately balance between the design objectives: preventing exercises of market power when the market would be most susceptible to it, and the consequences most severe, while increasing the emphasis on limiting the burden and potential interference of the mitigation process in conditions where concerns about market power are lessened.

1							
2	V	III. CONCLUSION					
3 4	Q:	Does this conclude your testimony?					
5	A:	Yes, this concludes our testimony.					
6							
7							
8	I dec	clare under penalty of perjury that the foregoing is true and correct.					
10	Executed on December 31, 2020.						
11							
12 13							
14		_Matthew Brewster					
15		Matthew Brewster					
16							
17 18							
19							
20		Christopher Geissler					
21		Christopher Geissler					
22							
23							
24							

New England Governors, State Utility Regulators and Related Agencies*

Connecticut

The Honorable Ned Lamont
Office of the Governor
State Capitol
210 Capitol Ave.
Hartford, CT 06106
bob.clark@ct.gov

Connecticut Attorney General Office 55 Elm Street Hartford, CT 06106 Seth.Hollander@ct.gov Robert.Marconi@ct.gov

Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106
steven.cadwallader@ct.gov
robert.luysterborghs@ct.gov

Connecticut Public Utilities Regulatory Authority 10 Franklin Square New Britain, CT 06051-2605 michael.coyle@ct.gov

Maine

The Honorable Janet Mills
One State House Station
Office of the Governor
Augusta, ME 04333-0001
Jeremy.kennedy@maine.gov
Elise.baldacci@maine.gov

Maine Public Utilities Commission 18 State House Station Augusta, ME 04333-0018 Maine.puc@maine.gov

Massachusetts

The Honorable Charles Baker Office of the Governor State House Boston, MA 02133

Massachusetts Attorney General Office One Ashburton Place Boston, MA 02108 rebecca.tepper@state.ma.us

Massachusetts Department of Public Utilities One South Station Boston, MA 02110 Nancy.Stevens@state.ma.us morgane.treanton@state.ma.us Lindsay.griffin@mass.gov

New Hampshire

The Honorable Chris Sununu
Office of the Governor
26 Capital Street
Concord NH 03301
Jared.chicoine@nh.gov

New Hampshire Public Utilities Commission 21 South Fruit Street, Ste. 10
Concord, NH 03301-2429
tom.frantz@puc.nh.gov
george.mccluskey@puc.nh.gov
David.Shulock@puc.nh.gov
David.goyette@puc.nh.gov
RegionalEnergy@puc.nh.gov
kate.bailey@puc.nh.gov
amanda.noonan@puc.nh.gov
Corrine.lemay@puc.nh.gov

Rhode Island

The Honorable Gina Raimondo
Office of the Governor
82 Smith Street
Providence, RI 02903
Rosemary.powers@governor.ri.gov
christopher.kearns@energy.ri.gov
nicholas.ucci@energy.ri.gov

New England Governors, State Utility Regulators and Related Agencies*

Rhode Island Public Utilities Commission 89 Jefferson Blvd. Warwick, RI 02888 todd.bianco@puc.ri.gov Marion.Gold@puc.ri.gov

Vermont

The Honorable Phil Scott Office of the Governor 109 State Street, Pavilion Montpelier, VT 05609 jason.gibbs@vermont.gov

Vermont Public Utility Commission 112 State Street Montpelier, VT 05620-2701 mary-jo.krolewski@vermont.gov sarah.hofmann@vermont.gov Margaret.cheney@vermont.gov

Vermont Department of Public Service 112 State Street, Drawer 20 Montpelier, VT 05620-2601 bill.jordan@vermont.gov june.tierney@vermont.gov Ed.McNamara@vermont.gov

New England Governors, Utility Regulatory and Related Agencies

Jay Lucey Coalition of Northeastern Governors 400 North Capitol Street, NW, Suite 370 Washington, DC 20001 coneg@sso.org

Heather Hunt, Executive Director
New England States Committee on Electricity
655 Longmeadow Street
Longmeadow, MA 01106
HeatherHunt@nescoe.com
JasonMarshall@nescoe.com

Meredith Hatfield, Executive Director
New England Conference of Public Utilities
Commissioners
72 N. Main Street
Concord, NH 03301
mhatfield@necpuc.org

Anthony Roisman, President
New England Conference of Public Utilities
Commissioners
112 State Street – Drawer 20
Montpelier, VT05620
anthony.roisman@vermont.gov