PUBLIC VERSION

November 8, 2016

VIA ELECTRONIC FILING

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

Re: *ISO New England Inc.***,** Docket No. ER17-___-000,
Informational Filing for Qualification in the Forward Capacity Market
COMMENT DUE DATE OF NOVEMBER 23, 2016 PURSUANT TO THE TARIFF

Dear Secretary Bose:

Pursuant to Section III.13.8.1 of the ISO New England Transmission, Markets and Services Tariff (the "Tariff"),[1] ISO New England Inc. (the "ISO") hereby submits privileged and public (*i.e.*, redacted) versions of this informational filing for qualification in the Forward Capacity Market ("Informational Filing") for the 2020-2021 Capacity Commitment Period. The Tariff allows parties to comment on or challenge determinations provided in the Informational Filing. Pursuant to Tariff Section III.13.8.1(d), any comments or challenges to the ISO's determinations must be filed with the Federal Energy Regulatory Commission ("FERC" or "Commission") no later than 15 days from the date of this Informational Filing. **Accordingly, the ISO requests that the Commission issue a notice requiring that any comments or protests be filed on or before November 23, 2016.**

In accordance with Section III.13.8.1(d) of the Tariff, if the Commission does not issue an Order **within 75 days** after the date of this filing directing otherwise, the determinations described in the Informational Filing and any elections pursuant to Tariff Section III.13.1.2.3.2.1.1 shall be used in conducting the eleventh Forward Capacity Auction ("FCA"), which will be held beginning on February 6, 2017, and will procure the needed capacity for the six state New England Control Area for the 2020-2021 Capacity Commitment Period. This Informational Filing details determinations made by the ISO with respect to that FCA and provides supporting documentation for such determinations.

[1] Capitalized terms used but not otherwise defined in this filing have the meanings ascribed thereto in the Tariff.

For all Static, Export, and Administrative Export De-List Bids rejected by the Internal Market Monitor ("IMM"), privileged Attachment E of this Informational Filing includes the IMM's determination regarding the resource's de-list bid.[2] During the March 2016 timeframe, the IMM provided web-based training courses regarding de-list bid and Offer Review Trigger Price ("ORTP") reviews. Subsequent to the submission deadline, the IMM invited participants to present their submissions in person during June and July 2016 to facilitate a better understanding of the project for the IMM. Resources were notified of the IMM's final determinations in their Qualification Determination Notifications ("QDNs"), which were provided to Lead Market Participants on September 30, 2016. With respect to Static De-list Bids, no later than seven Business Days after the issuance of the QDN by the IMM, a resource could elect to submit revised prices of the Static De-list Bid for the resource at prices equal to or less than the IMM's determined bid price or elect to withdraw the Static De-List Bid. Resources that have Static De-List Bids will be entered into the Forward Capacity Auction as described in Section III.13.2.3.2(b).[3] Unlike previous FCAs, Permanent De-list Bids and Retirement De-List Bids were submitted earlier in the qualification process, specifically by March 18, 2016, pursuant to Section III.13.1.2.3.1. These bids were subsequently reviewed by the IMM and a determinations filing made on July 15, 2016 pursuant to Section III.13.8.1.(a).[4] The Commission accepted this filing on August 29, 2016.[5]

I. COMMUNICATIONS

The ISO is the private, non-profit entity that serves as the regional transmission organization ("RTO") for New England. The ISO operates and plans the New England bulk power system and administers New England's organized wholesale electricity market pursuant to the Tariff and the Transmission Operating Agreement with the New England Participating Transmission Owners. In its capacity as an RTO, the ISO has the responsibility to protect the short-term reliability of the New England Control Area and to operate the system according to reliability standards established by the Northeast Power Coordinating Council, Inc. ("NPCC") and the North American Electric Reliability Corporation ("NERC").

[2] Section III.13.1.2.3.2.1.1 of the Tariff addresses the IMM's review of de-list bids.

[3] *Id.*

[4] *ISO New England Inc.*, Filing of Permanent De-List Bids and Retirement De-List Bids Submitted for 2020-21 Forward Capacity Auction; Docket No. ER16-2215-000 (filed July 15, 2016).

[5] *ISO New England Inc.*, Letter Order Accepting Permanent De-List Bids and Retirement De-List Bids Submitted for 2020-2021 Forward Capacity Auction Filing, Docket No. ER16-2215-000 (issued August 9, 2016).

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

Kevin W. Flynn
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841
Tel: (413) 535-4177
Fax: (413) 535-4379
Email: Kflynn@iso-ne.com

Christopher Hamlen
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841
Tel: (413) 540-4425
Fax: (413) 535-4379
Email: chamlen@iso-ne.com

II. BACKGROUND AND OVERVIEW

The Tariff requires the ISO to make a filing setting forth specific information related to the FCA.[6] The Informational Filing is to include the locational capacity requirements of the eleventh FCA based upon the topology of the transmission system, and specifically which Capacity Zones are to be modeled in the auction. The Tariff also requires the ISO to identify the multipliers applied in determining the appropriate Capacity Values for Demand Resources, as well as specify the resources accepted or rejected in the qualification process for participation in the eleventh FCA.

The ISO has reviewed all resources requesting to participate in the eleventh FCA. These include Existing and New Generating Capacity Resources, Import Capacity Resources, Import Capacity Resources coupled with an Elective Transmission Upgrade, and Existing and New Demand Resources.[7] Pursuant to the Tariff, the Informational Filing must include the results of the IMM's review of certain offers and bids, *e.g.*, Existing Capacity Resources that seek to statically de-list above the Dynamic De-List Bid Threshold, and new resources that have requested to submit offers below the relevant Offer Review Trigger Prices.[8] This filing is the ISO's fulfillment of these requirements.

The Tariff also requires the Informational Filing to include the transmission interface limits used in the process of selecting which Capacity Zones will be modeled in the eleventh FCA; which existing and proposed transmission lines the ISO determines will be in service by the start of the 2020-2021 Capacity Commitment Period; the expected

[6] Section III.13.8.1(c) of the Tariff.

[7] Values in this filing are represented in FCA Qualified Capacity ("FCA QC") megawatts. Resources were required to submit Financial Assurance by October 31, 2016. Resources are required to submit Financial Assurance for a second time on January 23, 2017.

[8] Section III.13.8.1(c)(vii) and (viii) of the Tariff.

amount of installed capacity in each modeled Capacity Zone during the 2020-2021 Capacity Commitment Period; the Local Sourcing Requirement for each modeled import-constrained Capacity Zone; and the Maximum Capacity Limit for each modeled export-constrained Capacity Zone.[9]

In accordance with Section III.12.4, of the Tariff, the ISO determined that it will model three Capacity Zones in the eleventh FCA: the Southeast New England Capacity Zone ("SENE"), the Northern New England Capacity Zone ("NNE") and the Rest of Pool Capacity Zone. The SENE Capacity Zone includes Southeastern Massachusetts, Rhode Island and Northeastern Massachusetts/Boston. The SENE Capacity Zone will be modeled as an import-constrained Capacity Zone. The NNE Capacity Zone includes Maine, New Hampshire and Vermont. NNE will be modeled as an export-constrained Capacity Zone. The Rest of Pool Capacity Zone includes Connecticut and Western/Central Massachusetts.

The Tariff also requires that the Informational Filing include the loss multiplier used to derive the Capacity Value for Demand Resources.[10] For the eleventh FCA, this multiplier is 1.08.

Specific statistics related to the eleventh FCA are as follows:[11]

- The Installed Capacity Requirement ("ICR") for the 2020-2021 Capacity Commitment Period is 35,034 MW. After accounting for 959 MW of Hydro Quebec Interconnection Capability Credits ("HQICCs"), 34,075 MW is the net ICR ("NICR"). The ISO has submitted the 2020-2021 ICR for Commission review in another proceeding.[12]

- Qualified Existing Capacity Resources for the 2020-2021 Capacity Commitment Period consist of 31,625 MW[13] from Existing Generating Capacity Resources

[9] *See* Section III.13.8.1(c) of the Tariff. Contemporaneously with this filing, the ISO has submitted the 2020-2021 ICR and related values for Commission review in another proceeding. See, *ISO New England Inc. and New England Power Pool*, Filing of Installed Capacity Requirement, Hydro Quebec Interconnection Capability Credits and Related Values for the 2020-2021 Capacity Commitment Period, filed on November 8, 2016 ("2020-2021 ICR Filing"). The Marginal Reliability Impact ("MRI") Demand Curves are provided in the 2020-2012 ICR Filing.

[10] Section III.13.8.1(c)(v) of the Tariff.

[11] Values in this Transmittal Letter are rounded to eliminate decimals. Resources in the attachments are rounded to three decimal places.

[12] *See* footnote 9 *supra.*

[13] Consistent with how resources are treated within the FCA, this value, and all other Existing Generating Capacity values shown within this filing, include adjustments for significant increases in capacity qualified through the New Capacity Qualification Process pursuant to Section III.13.1.2.2.5 of the Tariff. Significant Increases can be found in Attachment F.

(intermittent and non-intermittent); 83 MW from Existing Import Capacity Resources;[14] and 2,797 MW from Existing Demand Resources,[15] totaling 34,505 MW of Existing Capacity. [16]

- A total of 1,622 MW of Static, Export, and Administrative Export De-List Bids were submitted for the eleventh FCA. Attachment E of this Informational Filing provides details regarding post QDN reductions or withdrawals.

- The ISO qualified 150 new capacity resources, totaling 5,958 MW.

In summary, the qualification process for the eleventh FCA resulted in 150 new projects, totaling 5,958 MW, and 34,505 MW of existing resources.

III. FILING CONTENTS AND REQUEST FOR PRIVILEGED TREATMENT

This Informational Filing includes the following materials:

- This transmittal letter – PUBLIC

- Attachment A: Existing Transmission Lines – PUBLIC

- Attachment B: Proposed Transmission Lines – PUBLIC

- Attachment C: Existing Generating, Import, and Demand Resource Capacity – PUBLIC

- Attachment D: New Generating, Import, and Demand Resource Capacity – CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

- Attachment E: Summary of All Static, Export, and Administrative Export De-List Bids Submitted – CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

- Attachment F: Significant Increases – CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

[14] Section IV.C.1 of this Transmittal Letter.

[15] *Id.*

[16] A resource qualified to participate in the FCA may change ownership on a monthly boundary. Changes in Lead Market Participant effective after the creation of this filing letter may not be reflected in the applicable numbers in this Filing and the attachments.

- Attachment G: Major Elements In The Determination of Expected Net Revenues – Generation – CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

- Attachment H: Major Elements In The Determination of Expected Net Revenues - Demand Resources – CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

- Attachment I: Notifications from the ISO sent to resources that were not qualified to participate in the FCA, notifications from the IMM sent to existing resources whose Static, Export, and Administrative Export De-List Bids were rejected and notifications from the IMM sent to new resources whose requests to submit offers below the Offer Review Trigger Price were rejected – CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

Section III.13.8.1 (c) of the Tariff requires the ISO to file the determinations in Sections III.13.8.1(c) (vi-viii) as confidential. These determinations are provided in Attachments D-H. Additionally, the notifications included in Attachment I were only sent to the Project Sponsor and include a detailed explanation of the ISO's or IMM's determination, which includes confidential information.[17] Therefore, the ISO requests that the Commission provide privileged treatment to Attachments D through I, as indicated above.

The privileged Attachments have been marked: **"Contains Privileged Information - Do Not Release."** The ISO is filing one version of the Informational Filing that includes the privileged information, which should not be released to the public. A public, redacted version of this Informational Filing, which does not include the privileged attachments, is also filed herewith.

Pursuant to Section III.13.8.1(c) of the Tariff, the ISO will publish the confidential information in Attachments D-H, no later than 15 days after the eleventh FCA.

IV. INFORMATIONAL FILING

A. Inputs Used to Model the FCA

Section III.13.8.1(c)(i-iv) of the Tariff requires the ISO to address in the Informational Filing the following inputs used to model the FCA: the Capacity Zones

[17] Because the information is commercially sensitive, the Commission has granted the ISO's requests to treat this information as confidential in Informational Filings for previous FCAs. *See, Order Accepting Informational Filing*, 138 FERC ¶ 61,196 (2012). This information is also confidential pursuant to Section III.13.8.1(c) of the Tariff.

modeled in the FCA; the transmission interface limits used to model the Capacity Zones in the FCA; the existing and proposed transmission lines that will be in service by the start of the Capacity Commitment Period; the expected amount of Installed Capacity in each modeled Capacity Zone; the Local Sourcing Requirement for each modeled import-constrained Capacity Zone; and the Maximum Capacity Limit for each modeled export-constrained Capacity Zone.

Contemporaneously with this filing, the ISO is filing the 2020-2021 ICR Filing with the Commission in which it submits for approval the 2020-2021 Capacity Commitment Period values for the ICR, the Local Sourcing Requirement for the SENE Capacity Zone, and the Maximum Capacity Limit for the NNE Capacity Zone.[18] Given that the 2020-2021 ICR Filing provides a comprehensive explanation of these values, the ISO does not repeat in detail those determinations here.

1. Existing and Proposed Transmission Lines and Transmission Interface Limits

Pursuant to Section III.13.8.1(c)(iii) of the Tariff, the ISO is required to provide the existing and proposed transmission lines that the ISO determines will be in service by the start of the 2020-2021 Capacity Commitment Period. Section III.12.6.2 of the Tariff establishes the initial threshold for transmission projects to be considered in service. Under this threshold, transmission projects submit critical path schedules, and must demonstrate that they are meeting certain milestones in the critical path schedule. Section III.12.6.2 of the Tariff also requires a statement from a company officer of the relevant transmission owner verifying that the critical path schedule submitted to the ISO is achievable.

For transmission projects that satisfy the threshold specified under Section III.12.6.2 of the Tariff, the ISO considers additional factors set forth in Section III.12.6.3 to determine if the project can be included in the network model for the relevant Capacity Commitment Period. The ISO has determined that the existing and proposed transmission lines listed in Attachments A and B will be in service by the start of the Capacity Commitment Period associated with the eleventh FCA.

The Informational Filing also identifies the transmission interface limits used in the process of determining the Local Sourcing Requirements and the Maximum Capacity Limit used in selecting the Capacity Zones modeled in the FCA.[19] Pursuant to Section III.12.5 of the Tariff, the ISO determines the transmission interface limits using network models that include existing and proposed transmission lines that the ISO concludes will be in service no later than the first day of the relevant Capacity Commitment Period. The ISO

[18] *See* footnote 9 *supra.*

[19] Section III.13.8.1(c)(ii) of the Tariff.

has calculated the transmission interface limits using a model that includes the existing and proposed transmission lines included in Attachments A and B. The following transmission interface limits were used in the process of calculating the SENE Capacity Zone Local Sourcing Requirement: The transmission interface limit of the Southeast New England import area of 5,700 MW. For the NNE Capacity Zone Maximum Capacity Limit, the North-South transmission interface limit was 2,725 MW. The transmission interface limits were determined consistent with Section 4 of ISO New England Planning Procedure No. 3 - Transmission Transfer Capability.

2. Capacity Zones

In accordance with Tariff Section III.12.4, the ISO will model three Capacity Zones in the eleventh FCA: SENE, NNE and Rest of Pool. SENE will be modeled as an import-constrained Capacity Zone. NNE will be modeled as an export-constrained Capacity Zone. These three Capacity Zones will also be modeled in subsequent reconfiguration auctions and Capacity Supply Obligation Bilaterals.

3. Local Sourcing Requirements and Maximum Capacity Limit

Section III.13.8.1(c) of the Tariff requires that the Informational Filing include the Local Sourcing Requirement for each modeled import-constrained Capacity Zone and the Maximum Capacity Limit for each export-constrained Capacity Zone. For the SENE modeled import-constrained Capacity Zone, the Local Sourcing Requirement is 9,810 MW. For the NNE modeled export-constrained Capacity Zone, the Maximum Capacity Limit is 8,980 MW.

4. The External Interface Limits

External interface limits, are determined by accounting for tie benefits with the remaining electrical capability of the lines available for the delivery of imported capacity, the latter being the amount of total capacity that can be imported to New England from neighboring Control Areas in the FCA.

The ISO has calculated the following external interface capabilities to be used for the purpose of calculating tie benefits and in the conduct of the eleventh FCA: for Quebec to New England interfaces, the Highgate import capability is 200 MW and the HQ Phase II import capability is 1,400 MW; for the New Brunswick to New England interface, the import capability is 700 MW; and for the New York to New England AC interface, the import capability is 1,400 MW and the direct current Cross Sound Cable import capability is zero MW. These values are the same as those used in the calculation of tie reliability benefits, for determining the ICR, and were reviewed as part of the stakeholder process.

After accounting for the following tie reliability benefits 145 MW from Quebec over Highgate; 959 MW from Quebec over the HQ Phase II interface; 500 MW from New

Brunswick over the New Brunswick to New England interface; and 346 MW from New York over the New York to New England AC interfaces, the maximum amount of import capacity resources that can be purchased over each interface without exceeding the interface limit is 55 MW for the Highgate Interface; 441 MW for the HQ Phase II Interface; 200 MW for the New Brunswick to New England interface; 1,054 MW for the New York to New England AC interfaces, and 0 MW for the Cross Sound Cable.[20] For the eleventh Forward Capacity Auction, there were no Export De-List Bids reduced or limited by export limits from New England to a neighboring Control Area.

B. Capacity Value of Demand Resources

Section III.13.8.1(c)(v) of the Tariff requires that the Informational Filing provide the multipliers applied in determining the Capacity Value of a Demand Resource, as described in Section III.13.7.1.5.1. For the eleventh FCA, the multiplier is 1.08, which represents avoided peak transmission and distribution losses.

C. List of Resources Accepted and Rejected

Section III.13.8.1(c)(vi) of the Tariff requires that the Informational Filing list the new resources that are accepted and rejected in the qualification process to participate in the FCA. Further, Section III.13.8.1(c)(vii) requires the ISO to provide the IMM's determinations regarding requests from new capacity resources to submit prices in the FCA below the relevant Offer Review Trigger Price, including information regarding each of the elements considered in the IMM's determination (other than revenues from ISO-administered markets) and whether that element was included or excluded in the determination of whether the offer is consistent with the resource's long run average costs net of expected revenues other than capacity revenues. Additionally, Section III.13.8.1(c)(viii) requires the IMM to provide an explanation of reasons for rejecting Static De-list Bids, Export De-list Bids, and Administrative Export De-list Bids.[21] Finally, Section III.13.8.1(c) provides that the determinations in Sections III.13.8.1 (c)(vi-viii) be filed as confidential with the Commission.

Lead Market Participants for existing resources were notified of their resource's initial Qualified Capacity on February 22, 2016. Each Project Sponsor or Lead Market Participant of a potential new capacity resource was notified of its QDN on September 30, 2016. Copies of the QDNs for resources that were not fully qualified to participate in the auction and for resources with rejected IMM de-list bids and offers below the relevant Offer Review Trigger Price are attached hereto as privileged Attachment I. Because the notifications contain commercially sensitive information, the ISO has requested that the

[20] Pursuant to Section III.12.10 of the Tariff.

[21] Pursuant to Section III.13.2.5.2.5 of the Tariff, all de-list bids are also subject to reliability review.

Commission treat the information in Attachment I as privileged. Summary explanations for the rejections are provided in privileged Attachments D, E, G and H.

1. Existing Resources

An Existing Capacity Resource may be an Existing Generating Capacity Resource, an Existing Import Capacity Resource, or an Existing Demand Resource. A total of 34,505 MW of Existing Capacity Resources qualified for the eleventh FCA; representing 31,625 MW from Existing Generating Capacity Resources, 83 MW from Existing Import Capacity Resources, and 2,797 MW from Existing Demand Resources. Attachment C shows the Existing Capacity Resources qualified for the eleventh FCA.

a. Existing Resources That Submitted De-List Bids

Existing Capacity Resources may opt out of the capacity market by submitting a de-list bid. This Informational Filing addresses Static De-list Bids, Export De-list Bids and Administrative Export De-list Bids. For the eleventh FCA, a total of 1,622 MW of pre-auction Static De-list Bids, Export De-list Bids and Administrative Export De-list Bids were submitted. Pursuant to Section III.13.1.2.3.2 of the Tariff, the IMM must review Export Bids and Static De-list Bids submitted by Market Participants above the Dynamic De-list Bid Threshold of $5.50/kW-month[22] at the Existing Capacity Qualification Deadline. For each resource, the IMM must determine if the de-list bid submitted by the participant is consistent with the four cost components comprising a de-list bid; (1) the participants' net going forward costs for the resource, (2) the participant's reasonable expectations of the resource's Capacity Performance Payments, (3) the participant's reasonable risk premium, and (4) opportunity costs.

The IMM reviewed each de-list bid and the supporting cost information. If the IMM determined that the bid is consistent with the participant's net going forward costs; reasonable expectations of the resource's Capacity Performance Payments; reasonable risk premium assumptions; and reasonable opportunity costs, the bid will be entered into the FCA as described in Section III.13.2.3.2.(b) of the Tariff. If the IMM determined that the participant's de-list bid is inconsistent with a reasonable estimate of any of those four elements of the de-list bid, then the IMM provided an IMM determined de-list bid.

A resource with an IMM determined de-list bid has six options to exercise during the finalization window. First, the Market Participant can choose to take no further action on the bid. In that event, if the participant is not pivotal, the participant-submitted price will be entered into the auction. If the participant is pivotal, the IMM determined de-list bid price will be entered into the auction. Second, the participant can elect to lower the de-list bid to a price that is not below the IMM determined de-list bid price. In that event, if

[22] See Section III.13.1.2.3.2.1.1 and III.13.1.4.1.1 of the Tariff.

the participant is not pivotal, then the participant-lowered price will be entered into the auction, and otherwise the IMM determined de-list bid price will be entered into the auction. Third, a participant can decide to lower their de-list bid price below the IMM determined de-list bid price. In that event, the participant-lowered price will be used in the Forward Capacity Auction. Fourth, the participant can withdraw the resource's de-list bid and decide to dynamically de-list within the auction. A resource making an election to reduce their de-list bid to less than or equal to the IMM determined de-list price or withdraw the de-list bid all together, is prohibited from challenging the IMM's determined de-list bid. Fifth, a participant can decide to accept the IMM determined de-list bid price. In that event, this price will be used in the Forward Capacity Auction. Sixth, the resource may challenge the IMM's determination and propose a different de-list bid detailing the bid and their justification based on the resource's net going forward costs, reasonable expectations about the resource's Capacity Performance Payments, reasonable risk premium assumptions, and reasonable opportunity costs pursuant to Section III.13.8.1(d) of the Tariff.

i. Accepted De-List Bids

Section III.13.8.1(c) of the Tariff requires the ISO to file the IMM's determinations regarding accepted de-list bids as confidential. Accordingly, a summary of the IMM accepted Static, Export, and Administrative Export De-List Bids are included in privileged Attachment E.

ii. Rejected De-List Bids

Section III.13.8.1(c) of the Tariff requires the ISO to file the IMM's determinations regarding rejected de-list bids as confidential. Accordingly, a summary of the IMM rejected Static, Export, and Administrative Export De-List Bids are included in privileged Attachment E. In addition, copies of the rejected de-list bid determination notifications are included in Attachment I.

2. New Resources

A New Capacity Resource may be a New Generating Capacity Resource, a New Import Capacity Resource, New Import Capacity Resource coupled with an Elective Transmission Upgrade or a New Demand Resource. All Project Sponsors of new resources must have submitted a New Capacity Show of Interest Form, and, at a later date, a New Capacity Qualification Package, in order to be eligible to participate in the FCA. A new resource is required to demonstrate in the New Capacity Show of Interest Form and the New Capacity Qualification Package that it can produce or curtail a specific megawatt value for the relevant Capacity Commitment Period.

a. Accepted New Resources

Attachment D, which pursuant to Section III.13.8.1(c) of the Tariff is filed as privileged, lists the new generating, import and Demand Resources qualified to participate in the eleventh FCA. Resources that were qualified but withdrew by the relevant deadline are excluded.[23] In addition, for those resources that have been qualified as incremental new capacity, only the incremental megawatt amount is shown.

b. Rejected New Resources

The ISO undertook a detailed analysis of each project to ascertain whether it met all of the qualification criteria for the eleventh FCA. This analysis involved a careful review of the interconnection of the resource and associated transmission upgrades that would be necessary to qualify a Generating Capacity Resource and careful review of Project Descriptions, Measurement and Verification Plans, Customer Acquisition Plans, Funding Plans. The ISO provided guidance to Market Participants and publicly posted the deadline in advance of the New Capacity Qualification Deadline. In accordance with Tariff Section III.13.1.1.2.3, the ISO worked in consultation with the applicable Transmission Owner in reaching each determination involving that Transmission Owner's assets. Similarly, the ISO consulted with Demand Resource Market Participants and sought to ascertain clarity on project submittals where needed.

Section III.13.8.1 (c) of the Tariff requires the ISO to file, as confidential, resources rejected in the qualification process, with the exception of new resources rejected due to the overlapping interconnection impacts analysis. Accordingly, rejected new resource projects are provided in privileged Attachment D. New resources rejected due to the overlapping interconnection impact analysis are described below. Resources that are not qualified to participate in the FCM may still be built and operated in the energy and other ancillary markets.

Genbright, LLC.

The Edens Solar project requested to be qualified with a summer Qualified Capacity of 0.068 MW in the Northeastern Massachusetts/Boston Load Zone. Because the point of interconnection could not be determined due to the lack of information from the Project Sponsor, the ISO could not conduct an overlapping interconnection impact analysis for the aforementioned project. Accordingly the aforementioned project was not qualified for the 2020-2021 Capacity Commitment Period.

[23] Section III.13.1.1.2 of the Tariff.

Genbright, LLC.

The Meadow Solar project requested to be qualified with a summer Qualified Capacity of 1.200 MW in the Northeastern Massachusetts/Boston Load Zone. Because the point of interconnection could not be determined due to the lack of information from the Project Sponsor, the ISO could not review the feasibility of interconnecting the aforementioned project and conduct an overlapping interconnection impact analysis for the project. Accordingly the aforementioned project was not qualified for the 2020-2021 Capacity Commitment Period.

Genbright, LLC.

The Wilbraham Solar project requested to be qualified with a summer Qualified Capacity of 0.300 MW in the Western/Central Massachusetts Load Zone. Because the point of interconnection could not be determined due to the lack of information from the Project Sponsor, the ISO could not conduct an overlapping interconnection impact analysis for the aforementioned project. Accordingly the aforementioned project was not qualified for the 2020-2021 Capacity Commitment Period.

New projects in Maine north of the Orrington South Interface

The following new resource projects in Maine were not qualified because the overlapping interconnection impact analysis determined that the addition of the projects would overload the Orrington South interface. In each case, due to the complexity of the transmission planning analyses necessary to fully identify the upgrades and the amount of additional transfer capability necessary to allow new resources to qualify north of the Orrington South interface, the ISO determined that the upgrades are not expected to be in place prior to the start of the 2020-2021 Capacity Commitment Period. It is important to note that none of these resources have requested a preliminary overlapping interconnection impact analysis pursuant to Schedules 22 or 23 of the ISO Tariff (the Large/Small Generator Interconnection Procedures) to identify potential upgrades necessary for the resource to qualify for participation in the FCA.[24] Resources that are not qualified to participate in the FCM may still be built and operated in the energy and other ancillary markets. In fact, several of the resources that have not been qualified for the FCA because of the Orrington South interface constraint, have nonetheless built their projects and are providing energy (but not capacity) to the New England Control Area.

Seneca Energy II, LLC.

[24]Section 7.3 of Schedule 22 of the Open Access Transmission Tariff.

The Juniper Ridge Energy FCA 10 project requested to be qualified with a summer Qualified Capacity of 4.600 MW in the Maine Load Zone. The overlapping interconnection impact analysis determined that the Orrington South interface would be overloaded after the addition of the Juniper Ridge Energy FCA 10 project. Due to the complexity of the transmission planning analyses necessary to fully identify the upgrades and the amount of additional transfer capability necessary to allow new resources to qualify north of the Orrington South interface, the ISO has determined that the upgrades are not expected to be in place prior to the start of the 2020-2021 Capacity Commitment Period.

Black Bear Hydro Partners, LLC.

The Orono - A Hydro project requested to be qualified with a summer Qualified Capacity of 1.352 MW in the Maine Load Zone. The overlapping interconnection impact analysis determined that the Orrington South interface would be overloaded after the addition of the Orono - A Hydro project. Due to the complexity of the transmission planning analyses necessary to fully identify the upgrades and the amount of additional transfer capability necessary to allow new resources to qualify north of the Orrington South interface, the ISO has determined that the upgrades are not expected to be in place prior to the start of the 2020-2021 Capacity Commitment Period.

Black Bear Hydro Partners, LLC.

The Orono - B Hydro project requested to be qualified with a summer Qualified Capacity of 3.495 MW in the Maine Load Zone. The overlapping interconnection impact analysis determined that the Orrington South interface would be overloaded after the addition of the Orono - B Hydro project. Due to the complexity of the transmission planning analyses necessary to fully identify the upgrades and the amount of additional transfer capability necessary to allow new resources to qualify north of the Orrington South interface, the ISO has determined that the upgrades are not expected to be in place prior to the start of the 2020-2021 Capacity Commitment Period.

Black Bear Hydro Partners, LLC.

The Stillwater - B Hydro project requested to be qualified with a summer Qualified Capacity of 1.764 MW in the Maine Load Zone. The overlapping interconnection impact analysis determined that the Orrington South interface would be overloaded after the addition of the Stillwater - B Hydro project. Due to the complexity of the transmission planning analyses necessary to fully identify the upgrades and the amount of additional transfer capability necessary to allow new resources to qualify north of the Orrington South interface, the ISO has determined that the upgrades are not expected to be in place prior to the start of the 2020-2021 Capacity Commitment Period.

EDF Energy Services, LLC.

The Passadumkeag Windpark, LLC project requested to be qualified with a summer Qualified Capacity of 11.390 MW in the Maine Load Zone. The overlapping interconnection impact analysis determined that the Orrington South interface would be overloaded after the addition of the Passadumkeag Windpark, LLC project. Due to the complexity of the transmission planning analyses necessary to fully identify the upgrades and the amount of additional transfer capability necessary to allow new resources to qualify north of the Orrington South interface, the ISO has determined that the upgrades are not expected to be in place prior to the start of the 2020-2021 Capacity Commitment Period.

c. Requested Prices below the relevant Offer Review Trigger Price

Pursuant to Section III.A.21.2 of the Tariff, the IMM reviews requests submitted by a new capacity resource to submit offers in the FCA below the Offer Review Trigger Price for the applicable resource type. If the IMM determines that the requested offer price is inconsistent with the IMM's capacity price estimate, then the resource's New Resource Offer Floor Price will be set to a level that is consistent with the capacity price estimate, as determined by the IMM.[25] The IMM's capacity price estimate is derived by entering all relevant resource costs and non-capacity revenue data, as well as assumptions regarding depreciation, taxes, and discount rate into the capital budgeting model used to develop the relevant Offer Review Trigger Price and calculating the break-even contribution required from the Forward Capacity Market to yield a discounted cash flow with a net present value of zero for the project.

Section III.13.8.1(c)(vii) requires the ISO to provide the IMM's determinations regarding requested offer prices below the relevant Offer Review Trigger Price, including information regarding each of the elements considered in the IMM's determination (other than revenues from ISO-administered markets) and whether that element was included or excluded in the determination of whether the offer is consistent with the resource's long run average costs net of expected revenues other than capacity revenues (the IMM's capacity price estimate) for the resource. Pursuant to Section III.13.8.1(c) of the Tariff, the IMM determinations regarding requested offers below the relevant Offer Review Trigger Price and the information regarding each of the revenue elements considered in the IMM's determination (other than revenues from ISO-administered markets) are filed as privileged in Attachments D, G and H. Section III.13.8.1(c) of the Tariff also requires the ISO to file the Generating Capacity Resource supply offers[26] and New Demand Resource offers evaluated by the IMM as confidential. Accordingly, the IMM evaluated Generating Capacity Resources supply offers and New Demand Resource offers are included in the

[25] Section III.13.A.21.2(b)(iv) of the Tariff.

[26] The megawatt values presented in Attachment G are offered megawatts and may differ from the FCA Qualified Capacity megawatts found in Attachment D.

privileged Attachments G and H.[27] In addition, copies of the IMM notifications for rejected requests by a new capacity resource to submit offers in the FCA below the Offer Review Trigger Price are included in Attachment I.

V. SERVICE

The ISO has served via electronic mail the foregoing document and attachments upon the Governance Participants posted on the ISO's website at https://www.iso-ne.com/participate/participant-asset-listings/directory?id=1&type=committee

VI. CONCLUSION

In this Informational Filing, the ISO has presented all of the information required by Section III.13.8.1 of the Tariff. The ISO has reviewed and set forth the characteristics of the transmission system, and Capacity Zones that will be modeled for the auction. The ISO has also calculated and presented a multiplier for Demand Resources as required by the Tariff. The ISO and the IMM, as appropriate, have reviewed a large number of offers and bids and determined which should qualify for the FCA pursuant to the Tariff, and have provided their determinations herein as required by the Tariff. Overall, 34,505 MW of existing and 5,958 MW of new resources are qualified to participate in the eleventh FCA.

Respectfully submitted,

By: */s/ Kevin W. Flynn*

Kevin W. Flynn
Senior Regulatory Counsel
ISO New England Inc.
One Sullivan Road
Holyoke, MA 01040-2841
Tel: (413) 535-4177
Fax: (413) 535-4379
E-mail: kflynn@iso-ne.com

Attachments

[27] The megawatt values presented in Attachment H are offered megawatts and may differ from the FCA Qualified Capacity megawatts found in Attachment D.

Attachment A: Existing Transmission Lines

Attachment A
Existing Transmission Lines

See “ISO-New England Pool Transmission Facilities (2016) Final" available at:
https://www.iso-ne.com/static-assets/documents/2016/02/2016_final_ptf_catalog.pdf

Attachment B: Proposed Transmission Lines

Attachment B
Proposed Transmission Lines

See “2020-2021 FCM New Transmission Project Tracker" available at:
https://www.iso-ne.com/static-assets/documents/2016/01/transmission_projects_tracker_jan_2016.xlsx

Attachment C: Existing Generating, Import, and Demand Resource Capacity

PUBLIC VERSION

Attachment C
Existing Generating, Import, and Demand Resource Capacity

Summary of Existing Resources			
Type	**Sub-type**	**Count**	**FCA Qualified Capacity (MW)**
DR	On Peak	76	1,781.298
	RTDR	77	421.083
	RTEG	20	129.664
	Seasonal Peak	7	464.813
	DR Totals	**180**	**2,796.858**
Gen	Intermittent	349	906.179
	Non Intermittent	256	30,600.841
	Significant Increase	16	118.071
	Gen Totals	**621**	**31,625.091**
Import	Resource Backed	3	82.800
	Pool Backed	-	-
	Import Totals	**3**	**82.800**
TOTALS		**804**	**34,504.749**

Mutually Exclusive		
	Total Count	**Final Qualified Capacity (MW)**
New Resources	**7**	**339.735**
Existing Resources	**7**	**298.375**

Mutually Exclusive Resources are resources that will clear as either new or existing, but not both.

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
1	DR	ON_PEAK	12696	7.9 MW CHP Plant	Northern New England	NEWHAMPSHIRE	10.800
2	DR	ON_PEAK	12694	Acushnet Company - Ball Plant II - Combined Heat and Power Project	Southeast New England	SEMASS	2.111
3	DR	ON_PEAK	12590	Ameresco CT DSM	Rest-of-Pool	CONNECTICUT	6.029
4	DR	ON_PEAK	16687	Bangor Hydro OP	Northern New England	MAINE	9.384
5	DR	ON_PEAK	38447	Boston_PeakDR	Southeast New England	NEMASSBOST	2.700
6	DR	ON_PEAK	12749	Bridgewater Correctional Complex Cogeneration	Southeast New England	SEMASS	1.412
7	DR	ON_PEAK	12822	Burlington Electric Department - On-Peak Efficiency	Northern New England	VERMONT	5.734
8	DR	ON_PEAK	12597	Cambridge Energy Alliance-1	Southeast New England	NEMASSBOST	0.653
9	DR	ON_PEAK	12598	Cambridge Energy Alliance-2	Southeast New England	NEMASSBOST	4.736
10	DR	ON_PEAK	12705	Cape Light Compact Energy Efficiency Portfolio	Southeast New England	SEMASS	40.805
11	DR	ON_PEAK	9100	CL&P Connecticut Portfolio	Rest-of-Pool	CONNECTICUT	10.349
12	DR	ON_PEAK	9127	CL&P CT Portfolio - 2007	Rest-of-Pool	CONNECTICUT	0.000
13	DR	ON_PEAK	9115	CL&P Dist Gen 2007	Rest-of-Pool	CONNECTICUT	0.293
14	DR	ON_PEAK	12583	CL&P Distributed Generation FCM 2010	Rest-of-Pool	CONNECTICUT	34.232
15	DR	ON_PEAK	9109	Commercial Energy Efficiency	Northern New England	VERMONT	0.085
16	DR	ON_PEAK	12584	Conservation and Load Management Program	Rest-of-Pool	CONNECTICUT	3.030
17	DR	ON_PEAK	12779	CPLN CT On-Peak	Rest-of-Pool	CONNECTICUT	1.004
18	DR	ON_PEAK	12832	CPLN MA NEMA OP	Southeast New England	NEMASSBOST	7.106
19	DR	ON_PEAK	12835	CPLN MA SEMA OP	Southeast New England	SEMASS	0.230
20	DR	ON_PEAK	12838	CPLN MA WC OP	Rest-of-Pool	WCMASS	7.491
21	DR	ON_PEAK	12841	CPLN ME OP	Northern New England	MAINE	0.038
22	DR	ON_PEAK	12843	CPLN RI OP	Southeast New England	RHODEISLAND	0.280
23	DR	ON_PEAK	12844	CPLN VT OP	Northern New England	VERMONT	0.000
24	DR	ON_PEAK	12786	CSG Aggregation of DG and 24 hr lighting EE - NEMA1	Southeast New England	NEMASSBOST	12.318
25	DR	ON_PEAK	38387	CSG Aggregation of DG and 24 hr lighting EE - NEMA1_2	Southeast New England	NEMASSBOST	2.743
26	DR	ON_PEAK	12791	CSG Aggregation of DG and 24 hr lighting EE - SEMA1	Southeast New England	SEMASS	1.517
27	DR	ON_PEAK	38388	CSG Aggregation of DG and 24 hr lighting EE - SEMA1_2	Southeast New England	SEMASS	2.333
28	DR	ON_PEAK	12799	CSG Aggregation of DG and 24 hr lighting EE - WCMA1	Rest-of-Pool	WCMASS	1.053
29	DR	ON_PEAK	38389	CSG Aggregation of DG and 24 hr lighting EE - WCMA1_2	Rest-of-Pool	WCMASS	2.333
30	DR	ON_PEAK	12790	CSG Aggregation of DG and 24 hr lighting EE -RI	Southeast New England	RHODEISLAND	0.217

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
31	DR	ON_PEAK	12586	Efficiency Maine Residential Efficient Products	Northern New England	MAINE	7.657
32	DR	ON_PEAK	35453	Efficiency Maine Trust	Northern New England	MAINE	11.136
33	DR	ON_PEAK	16651	Efficiency Maine Trust Efficient Products	Northern New England	MAINE	27.920
34	DR	ON_PEAK	37112	Efficiency Maine Trust FCA6	Northern New England	MAINE	1.890
35	DR	ON_PEAK	38057	Efficiency Maine Trust FCA6 B	Northern New England	MAINE	68.720
36	DR	ON_PEAK	38390	Efficiency Maine Trust FCA9	Northern New England	MAINE	4.049
37	DR	ON_PEAK	14579	FGE Energy Efficiency Portfolio 2011	Rest-of-Pool	WCMASS	0.222
38	DR	ON_PEAK	15586	Gardner Wind Turbine	Rest-of-Pool	WCMASS	0.318
39	DR	ON_PEAK	12753	MA SEMA state colleges	Southeast New England	SEMASS	0.147
40	DR	ON_PEAK	38311	NEMA CHP	Southeast New England	NEMASSBOST	2.238
41	DR	ON_PEAK	9122	ngrid nema odr eeproject_1	Southeast New England	NEMASSBOST	2.378
42	DR	ON_PEAK	9114	ngrid nh odr eeproject_1	Northern New England	NEWHAMPSHIRE	0.659
43	DR	ON_PEAK	9116	ngrid ri odr eeproject_1	Southeast New England	RHODEISLAND	2.583
44	DR	ON_PEAK	9120	ngrid sema odr eeproject_1	Southeast New England	SEMASS	2.562
45	DR	ON_PEAK	9121	ngrid wcma odr eeproject_1	Rest-of-Pool	WCMASS	2.920
46	DR	ON_PEAK	12670	ngrid_nema_fca1_eeodr	Southeast New England	NEMASSBOST	125.351
47	DR	ON_PEAK	12671	ngrid_nh_fca1_eeodr	Northern New England	NEWHAMPSHIRE	7.214
48	DR	ON_PEAK	12672	ngrid_ri_fca1_eeodr	Southeast New England	RHODEISLAND	194.020
49	DR	ON_PEAK	38483	Ngrid_SEMA_CHP	Southeast New England	SEMASS	1.692
50	DR	ON_PEAK	12673	ngrid_sema_fca1_eeodr	Southeast New England	SEMASS	166.447
51	DR	ON_PEAK	12674	ngrid_wcma_fca1_eeodr	Rest-of-Pool	WCMASS	231.857
52	DR	ON_PEAK	9128	NHEC CORE EE Pgm Portfolio 1	Northern New England	NEWHAMPSHIRE	0.000
53	DR	ON_PEAK	12757	NHEC Energy Efficiency Programs	Northern New England	NEWHAMPSHIRE	0.940
54	DR	ON_PEAK	38468	Norfolk-Walpole Co-Gen	Southeast New England	SEMASS	1.296
55	DR	ON_PEAK	12684	NSTAR EE NEMA	Southeast New England	NEMASSBOST	401.577
56	DR	ON_PEAK	12685	NSTAR EE SEMA	Southeast New England	SEMASS	80.617
57	DR	ON_PEAK	9126	NSTAR NEMA 07	Southeast New England	NEMASSBOST	0.000
58	DR	ON_PEAK	9123	NSTAR SEMA	Southeast New England	SEMASS	2.074
59	DR	ON_PEAK	15543	Plymouth Wind	Southeast New England	SEMASS	0.000
60	DR	ON_PEAK	9105	PSNH CORE EE Pgm Portfolio I	Northern New England	NEWHAMPSHIRE	2.237
61	DR	ON_PEAK	12693	PSNH CORE Energy Efficiency Programs	Northern New England	NEWHAMPSHIRE	69.919
62	DR	ON_PEAK	9108	Residential Energy Efficienc	Northern New England	VERMONT	0.008
63	DR	ON_PEAK	38217	RI CHP	Southeast New England	RHODEISLAND	10.399
64	DR	ON_PEAK	12754	Tewksbury State Hospital Cogenerator	Rest-of-Pool	WCMASS	0.734
65	DR	ON_PEAK	12801	UES CORE Energy Efficiency Programs	Northern New England	NEWHAMPSHIRE	7.935
66	DR	ON_PEAK	9125	UES EE Project 2007	Northern New England	NEWHAMPSHIRE	0.000
67	DR	ON_PEAK	14580	UES Energy Efficiency Portfolio 2011	Northern New England	NEWHAMPSHIRE	0.271
68	DR	ON_PEAK	9129	UMass Amherst - 4 MW Steam Turbine	Rest-of-Pool	WCMASS	1.620

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
69	DR	ON_PEAK	12657	Unitil CORE Energy Efficiency Programs-2	Rest-of-Pool	WCMASS	7.940
70	DR	ON_PEAK	9118	Unitil EE Project -2007	Rest-of-Pool	WCMASS	0.000
71	DR	ON_PEAK	12802	University of Massachusetts Central Heating Plant-3	Rest-of-Pool	WCMASS	10.260
72	DR	ON_PEAK	12845	Vermont Efficiency Portfolio-1	Northern New England	VERMONT	75.212
73	DR	ON_PEAK	38216	WCMA CHP	Rest-of-Pool	WCMASS	10.058
74	DR	ON_PEAK	16790	WCMA Project E	Rest-of-Pool	WCMASS	0.400
75	DR	ON_PEAK	38219	WMECO EE WCMA	Rest-of-Pool	WCMASS	64.805
76	DR	ON_PEAK	9131	WMECO MA Portfolio 2006	Rest-of-Pool	WCMASS	0.000
77	DR	REAL_TIME	10361	BOC Kittery Load	Northern New England	MAINE	9.396
78	DR	REAL_TIME	10106	Citizens Group A	Northern New England	VERMONT	5.076
79	DR	REAL_TIME	16713	Comverge CoolSentry 2	Rest-of-Pool	CONNECTICUT	1.072
80	DR	REAL_TIME	16718	Comverge CoolSentry 4	Rest-of-Pool	CONNECTICUT	0.947
81	DR	REAL_TIME	38485	CT_DR	Rest-of-Pool	CONNECTICUT	0.000
82	DR	REAL_TIME	38487	CT_RTDR	Rest-of-Pool	CONNECTICUT	2.160
83	DR	REAL_TIME	38360	DRCR_Boston_201403	Southeast New England	NEMASSBOST	10.000
84	DR	REAL_TIME	38322	DRCR_Central MA_201403	Rest-of-Pool	WCMASS	10.000
85	DR	REAL_TIME	38324	DRCR_Lower SEMA_201403	Southeast New England	SEMASS	3.038
86	DR	REAL_TIME	38331	DRCR_Rhode Island_201403	Southeast New England	RHODEISLAND	18.900
87	DR	REAL_TIME	38334	DRCR_SEMA_201403	Southeast New England	SEMASS	20.034
88	DR	REAL_TIME	37853	Hess DR Northwest VT 2013-14	Northern New England	VERMONT	0.000
89	DR	REAL_TIME	37854	Hess DR Northwest VT 2014-15	Northern New England	VERMONT	0.000
90	DR	REAL_TIME	37855	Hess DR Northwest VT 2015-16	Northern New England	VERMONT	0.000
91	DR	REAL_TIME	10091	MWRA Deer Island	Southeast New England	NEMASSBOST	15.660
92	DR	REAL_TIME	38396	NEMA 1 - New T4	Southeast New England	NEMASSBOST	1.000
93	DR	REAL_TIME	38268	NEMA 1 EG	Southeast New England	NEMASSBOST	1.620
94	DR	REAL_TIME	38398	NEMA 2 - New T4	Southeast New England	NEMASSBOST	1.000
95	DR	REAL_TIME	38270	NEMA 2 EG	Southeast New England	NEMASSBOST	1.620
96	DR	REAL_TIME	38400	RI 1 - New T4	Southeast New England	RHODEISLAND	2.592
97	DR	REAL_TIME	38401	RI 1 - Retrofit	Southeast New England	RHODEISLAND	1.296
98	DR	REAL_TIME	38276	RI 1 EG	Southeast New England	RHODEISLAND	1.080
99	DR	REAL_TIME	16700	RI CoolSentry	Southeast New England	RHODEISLAND	3.338
100	DR	REAL_TIME	38120	RTDR_50017_Bangor Hydro (7504) - 3	Northern New England	MAINE	2.430
101	DR	REAL_TIME	38121	RTDR_50017_Boston (7507) - 3	Southeast New England	NEMASSBOST	0.000
102	DR	REAL_TIME	38122	RTDR_50017_Central MA (7515) - 3	Rest-of-Pool	WCMASS	8.457
103	DR	REAL_TIME	38123	RTDR_50017_Eastern CT (7500) - 3	Rest-of-Pool	CONNECTICUT	5.806
104	DR	REAL_TIME	38124	RTDR_50017_Lower SEMA (7511) - 3	Southeast New England	SEMASS	2.094
105	DR	REAL_TIME	38125	RTDR_50017_Maine (7505) - 3	Northern New England	MAINE	58.299
106	DR	REAL_TIME	38126	RTDR_50017_New Hampshire (7509) - 3	Northern New England	NEWHAMPSHIRE	6.390
107	DR	REAL_TIME	38127	RTDR_50017_North Shore (7508) - 3	Southeast New England	NEMASSBOST	0.000
108	DR	REAL_TIME	38128	RTDR_50017_Northern CT (7501) - 3	Rest-of-Pool	CONNECTICUT	9.953

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
109	DR	REAL_TIME	38129	RTDR_50017_Northwest Vermont (7513) - 3	Northern New England	VERMONT	21.382
110	DR	REAL_TIME	38130	RTDR_50017_Norwalk - Stamford (7502) - 3	Rest-of-Pool	CONNECTICUT	2.131
111	DR	REAL_TIME	38131	RTDR_50017_Portland Maine (7506) - 3	Northern New England	MAINE	2.110
112	DR	REAL_TIME	38132	RTDR_50017_Rhode Island (7518) - 3	Southeast New England	RHODEISLAND	9.818
113	DR	REAL_TIME	38134	RTDR_50017_Seacoast (7510) - 3	Northern New England	NEWHAMPSHIRE	1.391
114	DR	REAL_TIME	38133	RTDR_50017_SEMA (7512) - 3	Southeast New England	SEMASS	4.290
115	DR	REAL_TIME	38135	RTDR_50017_Springfield MA (7516) - 3	Rest-of-Pool	WCMASS	7.423
116	DR	REAL_TIME	38136	RTDR_50017_Vermont (7514) - 3	Northern New England	VERMONT	2.690
117	DR	REAL_TIME	38137	RTDR_50017_Western CT (7503) - 3	Rest-of-Pool	CONNECTICUT	18.576
118	DR	REAL_TIME	38138	RTDR_50017_Western MA (7517) - 3	Rest-of-Pool	WCMASS	14.008
119	DR	REAL_TIME	38392	RTDR_50689_Bangor Hydro (7504) - Grp A_2	Northern New England	MAINE	0.000
120	DR	REAL_TIME	38394	RTDR_50689_Maine (7505) - Grp A_2	Northern New England	MAINE	0.000
121	DR	REAL_TIME	38210	RTDR_50689_North_Shore_38210	Southeast New England	NEMASSBOST	11.326
122	DR	REAL_TIME	37917	RTDR_50744_Boston (7507) - Grp C	Southeast New England	NEMASSBOST	18.710
123	DR	REAL_TIME	37918	RTDR_50744_Central MA (7515) - Grp A	Rest-of-Pool	WCMASS	2.280
124	DR	REAL_TIME	37919	RTDR_50744_Lower SEMA (7511) - Grp C	Southeast New England	SEMASS	0.939
125	DR	REAL_TIME	37920	RTDR_50744_North Shore (7508) - Grp C	Southeast New England	NEMASSBOST	1.599
126	DR	REAL_TIME	37922	RTDR_50744_Northern CT (7501) - Grp B	Rest-of-Pool	CONNECTICUT	10.331
127	DR	REAL_TIME	37924	RTDR_50744_SEMA (7512) - Grp C	Southeast New England	SEMASS	5.684
128	DR	REAL_TIME	37925	RTDR_50744_Springfield MA (7516) - Grp A	Rest-of-Pool	WCMASS	1.380
129	DR	REAL_TIME	37927	RTDR_50744_Western CT (7503) - Grp B	Rest-of-Pool	CONNECTICUT	5.297
130	DR	REAL_TIME	37928	RTDR_50786_Boston (7507)	Southeast New England	NEMASSBOST	1.022
131	DR	REAL_TIME	37929	RTDR_50786_Central MA (7515)	Rest-of-Pool	WCMASS	0.924
132	DR	REAL_TIME	37930	RTDR_50786_Eastern CT (7500)	Rest-of-Pool	CONNECTICUT	0.012
133	DR	REAL_TIME	37931	RTDR_50786_Lower SEMA (7511)	Southeast New England	SEMASS	0.000
134	DR	REAL_TIME	37933	RTDR_50786_New Hampshire (7509)	Northern New England	NEWHAMPSHIRE	0.000
135	DR	REAL_TIME	37934	RTDR_50786_North Shore (7508)	Southeast New England	NEMASSBOST	0.000
136	DR	REAL_TIME	37935	RTDR_50786_Northern CT (7501)	Rest-of-Pool	CONNECTICUT	2.789
137	DR	REAL_TIME	37936	RTDR_50786_Norwalk - Stamford (7502)	Rest-of-Pool	CONNECTICUT	0.043
138	DR	REAL_TIME	37937	RTDR_50786_Portland Maine (7506)	Northern New England	MAINE	0.000
139	DR	REAL_TIME	37938	RTDR_50786_Rhode Island (7518)	Southeast New England	RHODEISLAND	0.000

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
140	DR	REAL_TIME	37940	RTDR_50786_Seacoast (7510)	Northern New England	NEWHAMPSHIRE	0.000
141	DR	REAL_TIME	37939	RTDR_50786_SEMA (7512)	Southeast New England	SEMASS	0.000
142	DR	REAL_TIME	37941	RTDR_50786_Springfield MA (7516)	Rest-of-Pool	WCMASS	0.692
143	DR	REAL_TIME	37942	RTDR_50786_Vermont (7514)	Northern New England	VERMONT	0.000
144	DR	REAL_TIME	37943	RTDR_50786_Western CT (7503)	Rest-of-Pool	CONNECTICUT	0.309
145	DR	REAL_TIME	37944	RTDR_50786_Western MA (7517)	Rest-of-Pool	WCMASS	0.117
146	DR	REAL_TIME	38393	RTDR_51325_Maine (7505)	Northern New England	MAINE	59.400
147	DR	REAL_TIME	38402	SEMA 1 - New T4	Southeast New England	SEMASS	4.644
148	DR	REAL_TIME	38403	SEMA 1 - Retrofit	Southeast New England	SEMASS	2.268
149	DR	REAL_TIME	38272	SEMA 1 EG	Southeast New England	SEMASS	0.540
150	DR	REAL_TIME	38404	WCMA 1 - New T4	Rest-of-Pool	WCMASS	1.000
151	DR	REAL_TIME	38274	WCMA 1 EG	Rest-of-Pool	WCMASS	0.540
152	DR	REAL_TIME	38569	WesternMASS_RTDR	Rest-of-Pool	WCMASS	0.864
153	DR	REAL_TIME	38502	WestMA_RTEG	Rest-of-Pool	WCMASS	1.296
154	DR	REAL_TIME_EG	37990	RTEG_50017_Bangor Hydro (7504)	Northern New England	MAINE	0.433
155	DR	REAL_TIME_EG	37991	RTEG_50017_Boston (7507)	Southeast New England	NEMASSBOST	5.251
156	DR	REAL_TIME_EG	38139	RTEG_50017_Central MA (7515) - 3	Rest-of-Pool	WCMASS	14.016
157	DR	REAL_TIME_EG	37993	RTEG_50017_Eastern CT (7500)	Rest-of-Pool	CONNECTICUT	4.468
158	DR	REAL_TIME_EG	37994	RTEG_50017_Lower SEMA (7511)	Southeast New England	SEMASS	4.293
159	DR	REAL_TIME_EG	37995	RTEG_50017_Maine (7505)	Northern New England	MAINE	3.402
160	DR	REAL_TIME_EG	37996	RTEG_50017_New Hampshire (7509)	Northern New England	NEWHAMPSHIRE	11.253
161	DR	REAL_TIME_EG	37997	RTEG_50017_North Shore (7508)	Southeast New England	NEMASSBOST	0.711
162	DR	REAL_TIME_EG	37998	RTEG_50017_Northern CT (7501)	Rest-of-Pool	CONNECTICUT	7.416
163	DR	REAL_TIME_EG	37999	RTEG_50017_Northwest Vermont (7513)	Northern New England	VERMONT	2.200
164	DR	REAL_TIME_EG	38140	RTEG_50017_Norwalk - Stamford (7502) - 3	Rest-of-Pool	CONNECTICUT	7.456
165	DR	REAL_TIME_EG	38001	RTEG_50017_Portland Maine (7506)	Northern New England	MAINE	0.715
166	DR	REAL_TIME_EG	38141	RTEG_50017_Rhode Island (7518) - 3	Southeast New England	RHODEISLAND	10.249
167	DR	REAL_TIME_EG	38004	RTEG_50017_Seacoast (7510)	Northern New England	NEWHAMPSHIRE	0.684
168	DR	REAL_TIME_EG	38142	RTEG_50017_SEMA (7512) - 3	Southeast New England	SEMASS	7.889
169	DR	REAL_TIME_EG	38005	RTEG_50017_Springfield MA (7516)	Rest-of-Pool	WCMASS	2.116
170	DR	REAL_TIME_EG	38006	RTEG_50017_Vermont (7514)	Northern New England	VERMONT	2.589
171	DR	REAL_TIME_EG	38143	RTEG_50017_Western CT (7503) - 3	Rest-of-Pool	CONNECTICUT	37.515
172	DR	REAL_TIME_EG	38008	RTEG_50017_Western MA (7517)	Rest-of-Pool	WCMASS	3.142
173	DR	REAL_TIME_EG	17321	RTEG_76_Springfield MA (7516)	Rest-of-Pool	WCMASS	3.866
174	DR	SEASONAL_PEAK	12581	CL&P - Conservation & Load Management (CL&M) - Energy Efficiency Project	Rest-of-Pool	CONNECTICUT	359.014
175	DR	SEASONAL_PEAK	9103	CLM C&I Energy Efficiency	Rest-of-Pool	CONNECTICUT	3.639
176	DR	SEASONAL_PEAK	9102	CLM Residential Energy Effic	Rest-of-Pool	CONNECTICUT	0.000
177	DR	SEASONAL_PEAK	9104	EI C&I Energy Efficiency	Rest-of-Pool	CONNECTICUT	1.325
178	DR	SEASONAL_PEAK	16547	UI C&LM Programs	Rest-of-Pool	CONNECTICUT	4.083

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
179	DR	SEASONAL_PEAK	12600	UI Conservation and Load Management Programs	Rest-of-Pool	CONNECTICUT	70.788
180	DR	SEASONAL_PEAK	12806	WMECO - Conservation & Load Management (CL&M) - Energy Efficiency Project	Rest-of-Pool	WCMASS	25.964
COUNT OF DEMAND RESOURCES: 180					**SUBTOTAL DEMAND RESOURCES MW: 2,796.858**		

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
1	GEN	Intermittent	38544	17 Kelly Rd Sturbridge PV	Rest-of-Pool	WCMASS	0.372
2	GEN	Intermittent	38494	24 Boutilier Rd Leicester PV	Rest-of-Pool	WCMASS	0.248
3	GEN	Intermittent	38528	29 Oxford Rd Charlton PV	Rest-of-Pool	WCMASS	0.275
4	GEN	Intermittent	38539	40 Auburn Rd Millbury PV	Rest-of-Pool	WCMASS	0.248
5	GEN	Intermittent	38545	90 River Rd Sturbridge PV	Rest-of-Pool	WCMASS	0.372
6	GEN	Intermittent	38583	Agawam II	Rest-of-Pool	WCMASS	0.804
7	GEN	Intermittent	38575	Agawam Solar	Rest-of-Pool	WCMASS	0.702
8	GEN	Intermittent	38580	Amesbury	Southeast New England	NEMASSBOST	2.312
9	GEN	Intermittent	38553	Antrim Wind Resource	Northern New England	NEWHAMPSHIRE	5.000
10	GEN	Intermittent	819	ARNOLD FALLS	Northern New England	VERMONT	0.124
11	GEN	Intermittent	905	ASHUELOT HYDRO	Northern New England	NEWHAMPSHIRE	0.338
12	GEN	Intermittent	953	ATTLEBORO LANDFILL - QF	Southeast New England	SEMASS	0.103
13	GEN	Intermittent	931	AVERY DAM	Northern New England	NEWHAMPSHIRE	0.176
14	GEN	Intermittent	951	BALTIC MILLS - QF	Northern New England	NEWHAMPSHIRE	0.036
15	GEN	Intermittent	811	BANTAM	Rest-of-Pool	CONNECTICUT	0.026
16	GEN	Intermittent	754	BAR MILLS	Northern New England	MAINE	0.936
17	GEN	Intermittent	2278	BARKER LOWER HYDRO	Northern New England	MAINE	0.312
18	GEN	Intermittent	2279	BARKER UPPER HYDRO	Northern New England	MAINE	0.377
19	GEN	Intermittent	833	BARNET	Northern New England	VERMONT	0.062
20	GEN	Intermittent	1059	BARRE LANDFILL	Rest-of-Pool	WCMASS	0.604
21	GEN	Intermittent	824	BATH ELECTRIC HYDRO	Northern New England	NEWHAMPSHIRE	0.225
22	GEN	Intermittent	37072	Beaver_Ridge_Wind	Northern New England	MAINE	0.436
23	GEN	Intermittent	812	BEEBE HOLBROOK	Rest-of-Pool	WCMASS	0.066
24	GEN	Intermittent	38381	Belchertown SEd	Rest-of-Pool	WCMASS	0.530
25	GEN	Intermittent	2430	BELDENS-NEW	Northern New England	VERMONT	1.130
26	GEN	Intermittent	2280	BENTON FALLS HYDRO	Northern New England	MAINE	0.794
27	GEN	Intermittent	12180	BERKSHIRE COW POWER	Northern New England	VERMONT	0.226
28	GEN	Intermittent	14661	Berkshire Wind Power Project	Rest-of-Pool	WCMASS	1.746
29	GEN	Intermittent	38533	Berlin 1	Rest-of-Pool	WCMASS	0.347
30	GEN	Intermittent	38555	Berlin 2	Rest-of-Pool	WCMASS	0.347
31	GEN	Intermittent	38556	Berlin 3	Rest-of-Pool	WCMASS	0.347
32	GEN	Intermittent	38559	Berlin 4	Rest-of-Pool	WCMASS	0.347
33	GEN	Intermittent	337	BETHLEHEM	Northern New England	NEWHAMPSHIRE	15.249
34	GEN	Intermittent	1258	BHE SMALL HYDRO COMPOSITE	Northern New England	MAINE	0.900
35	GEN	Intermittent	38567	Billerica	Rest-of-Pool	WCMASS	2.307
36	GEN	Intermittent	1054	BLACKSTONE HYDRO ASSOC	Southeast New England	RHODEISLAND	0.000
37	GEN	Intermittent	1057	BLACKSTONE HYDRO LOAD REDUCER	Southeast New England	RHODEISLAND	0.280
38	GEN	Intermittent	37105	Blue Sky West	Northern New England	MAINE	42.270
39	GEN	Intermittent	10615	BLUE SPRUCE FARM U5	Northern New England	VERMONT	0.275
40	GEN	Intermittent	859	BOATLOCK	Rest-of-Pool	WCMASS	1.482
41	GEN	Intermittent	346	BOLTON FALLS	Northern New England	VERMONT	0.997
42	GEN	Intermittent	755	BONNY EAGLE W. BUXTON	Northern New England	MAINE	5.659
43	GEN	Intermittent	348	BOOT MILLS	Rest-of-Pool	WCMASS	7.529

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
44	GEN	Intermittent	860	BRIAR HYDRO	Northern New England	NEWHAMPSHIRE	0.968
45	GEN	Intermittent	357	BRIDGEWATER	Northern New England	NEWHAMPSHIRE	14.475
46	GEN	Intermittent	38584	Bridgewater	Southeast New England	SEMASS	0.462
47	GEN	Intermittent	356	BRISTOL REFUSE	Rest-of-Pool	CONNECTICUT	12.561
48	GEN	Intermittent	11925	BROCKTON BRIGHTFIELDS	Southeast New England	SEMASS	0.146
49	GEN	Intermittent	2439	BROCKWAY MILLS U5	Northern New England	VERMONT	0.029
50	GEN	Intermittent	2281	BROWNS MILL HYDRO	Northern New England	MAINE	0.200
51	GEN	Intermittent	358	BRUNSWICK	Northern New England	MAINE	9.073
52	GEN	Intermittent	362	BULLS BRIDGE	Rest-of-Pool	CONNECTICUT	2.974
53	GEN	Intermittent	910	CAMPTON DAM	Northern New England	NEWHAMPSHIRE	0.101
54	GEN	Intermittent	861	CANAAN	Northern New England	NEWHAMPSHIRE	0.691
55	GEN	Intermittent	38543	Carpenter Hill Rd Chartlon PV	Rest-of-Pool	WCMASS	0.368
56	GEN	Intermittent	815	CARVER FALLS	Northern New England	VERMONT	0.082
57	GEN	Intermittent	1122	CASCADE-DIAMOND-QF	Rest-of-Pool	WCMASS	0.083
58	GEN	Intermittent	816	CAVENDISH	Northern New England	VERMONT	0.289
59	GEN	Intermittent	789	CEC 002 PAWTUCKET U5	Southeast New England	RHODEISLAND	0.168
60	GEN	Intermittent	797	CEC 003 WYRE WYND U5	Rest-of-Pool	CONNECTICUT	0.493
61	GEN	Intermittent	807	CEC 004 DAYVILLE POND U5	Rest-of-Pool	CONNECTICUT	0.005
62	GEN	Intermittent	10401	CELLEY MILL U5	Northern New England	NEWHAMPSHIRE	0.028
63	GEN	Intermittent	792	CENTENNIAL HYDRO	Rest-of-Pool	WCMASS	0.160
64	GEN	Intermittent	832	CENTER RUTLAND	Northern New England	VERMONT	0.019
65	GEN	Intermittent	914	CHAMBERLAIN FALLS	Northern New England	NEWHAMPSHIRE	0.000
66	GEN	Intermittent	862	CHEMICAL	Rest-of-Pool	WCMASS	0.504
67	GEN	Intermittent	1050	CHICOPEE HYDRO	Rest-of-Pool	WCMASS	0.704
68	GEN	Intermittent	887	CHINA MILLS DAM	Northern New England	NEWHAMPSHIRE	0.005
69	GEN	Intermittent	38510	City of Gardner - Mill St. Solar	Rest-of-Pool	WCMASS	0.392
70	GEN	Intermittent	863	CLEMENT DAM	Northern New England	NEWHAMPSHIRE	0.429
71	GEN	Intermittent	886	COCHECO FALLS	Northern New England	NEWHAMPSHIRE	0.082
72	GEN	Intermittent	798	COLEBROOK	Rest-of-Pool	CONNECTICUT	0.682
73	GEN	Intermittent	1049	COLLINS HYDRO	Rest-of-Pool	WCMASS	0.349
74	GEN	Intermittent	834	COMPTU FALLS	Northern New England	VERMONT	0.174
75	GEN	Intermittent	13975	Corriveau Hydroelectric LLC	Northern New England	MAINE	0.042
76	GEN	Intermittent	38440	Cottage St PV	Rest-of-Pool	WCMASS	1.635
77	GEN	Intermittent	10801	COVENTRY CLEAN ENERGY	Northern New England	VERMONT	3.464
78	GEN	Intermittent	12323	COVENTRY CLEAN ENERGY #4	Northern New England	VERMONT	2.391
79	GEN	Intermittent	849	CRESCENT DAM	Rest-of-Pool	WCMASS	0.338
80	GEN	Intermittent	1209	CRRA HARTFORD LANDFILL	Rest-of-Pool	CONNECTICUT	1.374
81	GEN	Intermittent	2282	DAMARISCOTTA HYDRO	Northern New England	MAINE	0.000
82	GEN	Intermittent	38372	Dartmouth Solar	Southeast New England	SEMASS	1.430
83	GEN	Intermittent	38495	Deepwater Wind Block Island	Southeast New England	RHODEISLAND	6.830
84	GEN	Intermittent	38438	Deerfield Wind Project	Rest-of-Pool	WCMASS	8.100
85	GEN	Intermittent	835	DEWEY MILLS	Northern New England	VERMONT	0.384
86	GEN	Intermittent	618	DG WHITEFIELD, LLC	Northern New England	NEWHAMPSHIRE	16.043

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
87	GEN	Intermittent	2431	DODGE FALLS-NEW	Northern New England	VERMONT	3.472
88	GEN	Intermittent	970	DUDLEY HYDRO	Rest-of-Pool	WCMASS	0.021
89	GEN	Intermittent	864	DWIGHT	Rest-of-Pool	WCMASS	0.166
90	GEN	Intermittent	823	EAST BARNET	Northern New England	VERMONT	0.617
91	GEN	Intermittent	38114	East Bridgewater Solar Energy Project	Southeast New England	SEMASS	0.850
92	GEN	Intermittent	10403	EASTMAN BROOK U5	Northern New England	NEWHAMPSHIRE	0.011
93	GEN	Intermittent	542	ECO MAINE	Northern New England	MAINE	11.094
94	GEN	Intermittent	836	EMERSON FALLS	Northern New England	VERMONT	0.006
95	GEN	Intermittent	865	ERROL	Northern New England	NEWHAMPSHIRE	1.877
96	GEN	Intermittent	410	ESSEX 19 HYDRO	Northern New England	VERMONT	3.051
97	GEN	Intermittent	2283	EUSTIS HYDRO	Northern New England	MAINE	0.074
98	GEN	Intermittent	411	EXETER	Rest-of-Pool	CONNECTICUT	10.035
99	GEN	Intermittent	1047	FAIRFAX	Northern New England	VERMONT	1.761
100	GEN	Intermittent	38548	Fall River- Commerce	Southeast New England	SEMASS	0.535
101	GEN	Intermittent	38558	Fall River- Uxbridge	Southeast New England	SEMASS	1.474
102	GEN	Intermittent	412	FALLS VILLAGE	Rest-of-Pool	CONNECTICUT	2.467
103	GEN	Intermittent	38551	Fasll River - Innovation	Southeast New England	SEMASS	1.619
104	GEN	Intermittent	413	FIFE BROOK	Rest-of-Pool	WCMASS	3.225
105	GEN	Intermittent	38302	Fisher Road Solar I	Southeast New England	SEMASS	1.920
106	GEN	Intermittent	35593	Fiske Hydro	Northern New England	NEWHAMPSHIRE	0.054
107	GEN	Intermittent	943	FOUR HILLS LANDFILL	Northern New England	NEWHAMPSHIRE	0.569
108	GEN	Intermittent	16675	Fox Island Wind	Northern New England	MAINE	0.000
109	GEN	Intermittent	38562	Franklin 1	Southeast New England	SEMASS	1.499
110	GEN	Intermittent	38565	Franklin 2	Southeast New England	SEMASS	2.121
111	GEN	Intermittent	882	FRANKLIN FALLS	Northern New England	NEWHAMPSHIRE	0.415
112	GEN	Intermittent	821	GAGE	Northern New England	VERMONT	0.176
113	GEN	Intermittent	2284	GARDINER HYDRO	Northern New England	MAINE	0.388
114	GEN	Intermittent	851	GARDNER FALLS	Rest-of-Pool	WCMASS	0.099
115	GEN	Intermittent	768	GARVINS HOOKSETT	Northern New England	NEWHAMPSHIRE	4.461
116	GEN	Intermittent	850	GLENDALE HYDRO	Rest-of-Pool	WCMASS	0.245
117	GEN	Intermittent	35555	GMCW	Northern New England	VERMONT	0.814
118	GEN	Intermittent	913	GOODRICH FALLS	Northern New England	NEWHAMPSHIRE	0.147
119	GEN	Intermittent	2434	GORGE 18 HYDRO-NEW	Northern New England	VERMONT	0.517
120	GEN	Intermittent	427	GORHAM	Northern New England	NEWHAMPSHIRE	1.177
121	GEN	Intermittent	38560	Grafton	Rest-of-Pool	WCMASS	0.925
122	GEN	Intermittent	38527	Grafton WD	Rest-of-Pool	WCMASS	0.715
123	GEN	Intermittent	1572	GRANBY SANITARY LANDFILL QF U5	Rest-of-Pool	WCMASS	2.392
124	GEN	Intermittent	14595	Granite Reliable Power	Northern New England	NEWHAMPSHIRE	12.426
125	GEN	Intermittent	900	GREAT FALLS LOWER	Northern New England	NEWHAMPSHIRE	0.103
126	GEN	Intermittent	10424	Great Lakes - Berlin Incremental	Northern New England	NEWHAMPSHIRE	8.948
127	GEN	Intermittent	1117	GREAT WORKS COMPOSITE	Northern New England	MAINE	0.015
128	GEN	Intermittent	12274	GREEN MOUNTAIN DAIRY	Northern New England	VERMONT	0.198
129	GEN	Intermittent	2285	GREENVILLE HYDRO	Northern New England	MAINE	0.077

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
130	GEN	Intermittent	866	GREGGS	Northern New England	NEWHAMPSHIRE	0.421
131	GEN	Intermittent	38538	Groton Road Shirley PV	Rest-of-Pool	WCMASS	0.415
132	GEN	Intermittent	37050	Groton Wind Project	Northern New England	NEWHAMPSHIRE	5.100
133	GEN	Intermittent	11052	GRTR NEW BEDFORD LFG UTIL PROJ	Southeast New England	SEMASS	2.424
134	GEN	Intermittent	2286	HACKETT MILLS HYDRO	Northern New England	MAINE	0.022
135	GEN	Intermittent	769	HADLEY FALLS 1&2	Rest-of-Pool	WCMASS	12.302
136	GEN	Intermittent	38115	Harrington Street PV Project	Rest-of-Pool	WCMASS	1.430
137	GEN	Intermittent	436	HEMPHILL 1	Northern New England	NEWHAMPSHIRE	14.137
138	GEN	Intermittent	957	HG&E HYDRO CABOT 1-4	Rest-of-Pool	WCMASS	1.214
139	GEN	Intermittent	783	HIGHGATE FALLS	Northern New England	VERMONT	3.376
140	GEN	Intermittent	16640	Hilldale Ave Haverhill PV	Southeast New England	NEMASSBOST	0.270
141	GEN	Intermittent	891	HILLSBORO MILLS	Northern New England	NEWHAMPSHIRE	0.006
142	GEN	Intermittent	38577	Holiday Hill Community Wind	Rest-of-Pool	WCMASS	0.784
143	GEN	Intermittent	38373	Holliston	Southeast New England	SEMASS	1.523
144	GEN	Intermittent	38475	Hoosac Wind Project	Rest-of-Pool	WCMASS	3.942
145	GEN	Intermittent	919	HOPKINTON HYDRO	Northern New England	NEWHAMPSHIRE	0.094
146	GEN	Intermittent	902	HOSIERY MILL DAM	Northern New England	NEWHAMPSHIRE	0.000
147	GEN	Intermittent	38480	Hubbardston SE	Rest-of-Pool	WCMASS	1.295
148	GEN	Intermittent	11408	HULL WIND TURBINE II	Southeast New England	SEMASS	0.047
149	GEN	Intermittent	1656	HULL WIND TURBINE U5	Southeast New England	SEMASS	0.032
150	GEN	Intermittent	2432	HUNTINGTON FALLS-NEW	Northern New England	VERMONT	1.564
151	GEN	Intermittent	856	HUNT'S POND	Rest-of-Pool	WCMASS	0.001
152	GEN	Intermittent	2426	Hydro Kennebec	Northern New England	MAINE	6.844
153	GEN	Intermittent	867	INDIAN ORCHARD	Rest-of-Pool	WCMASS	0.278
154	GEN	Intermittent	38250	Indian Orchard Photovoltaic Facility	Rest-of-Pool	WCMASS	0.595
155	GEN	Intermittent	38252	Indian River Power Supply# LLC	Rest-of-Pool	WCMASS	0.181
156	GEN	Intermittent	16659	Ipswich Wind Farm 1	Southeast New England	NEMASSBOST	0.151
157	GEN	Intermittent	38421	Jericho Power	Northern New England	NEWHAMPSHIRE	2.500
158	GEN	Intermittent	911	KELLEYS FALLS	Northern New England	NEWHAMPSHIRE	0.021
159	GEN	Intermittent	1119	KENNEBAGO HYDRO	Northern New England	MAINE	0.190
160	GEN	Intermittent	1273	KENNEBEC WATER U5	Northern New England	MAINE	0.102
161	GEN	Intermittent	786	KEZAR LEDGEMERE COMPOSITE	Northern New England	MAINE	0.468
162	GEN	Intermittent	12551	Kibby Wind Power	Northern New England	MAINE	14.719
163	GEN	Intermittent	837	KILLINGTON	Northern New England	VERMONT	0.003
164	GEN	Intermittent	35979	Kingdom Community Wind	Northern New England	VERMONT	8.773
165	GEN	Intermittent	800	KINNEYTOWN B	Rest-of-Pool	CONNECTICUT	0.114
166	GEN	Intermittent	839	LADD'S MILL	Northern New England	VERMONT	0.019
167	GEN	Intermittent	892	LAKEPORT DAM	Northern New England	NEWHAMPSHIRE	0.220
168	GEN	Intermittent	38376	Landcraft	Southeast New England	SEMASS	1.350
169	GEN	Intermittent	457	LAWRENCE HYDRO	Rest-of-Pool	WCMASS	6.159
170	GEN	Intermittent	14660	Lempster Wind	Northern New England	NEWHAMPSHIRE	2.501
171	GEN	Intermittent	38532	Leominster- South St.	Southeast New England	NEMASSBOST	1.409
172	GEN	Intermittent	894	LISBON HYDRO	Northern New England	NEWHAMPSHIRE	0.238

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
173	GEN	Intermittent	462	LISBON RESOURCE RECOVERY	Rest-of-Pool	CONNECTICUT	13.500
174	GEN	Intermittent	904	LOCHMERE DAM	Northern New England	NEWHAMPSHIRE	0.256
175	GEN	Intermittent	460	LOCKWOOD	Northern New England	MAINE	3.797
176	GEN	Intermittent	895	LOWER ROBERTSON DAM	Northern New England	NEWHAMPSHIRE	0.314
177	GEN	Intermittent	10406	LOWER VALLEY HYDRO U5	Northern New England	NEWHAMPSHIRE	0.088
178	GEN	Intermittent	950	LP ATHOL - QF	Rest-of-Pool	WCMASS	0.063
179	GEN	Intermittent	38378	LSRHS	Southeast New England	NEMASSBOST	0.420
180	GEN	Intermittent	1114	MADISON COMPOSITE	Northern New England	MAINE	0.000
181	GEN	Intermittent	16644	Main Street Whitinsville PV	Southeast New England	SEMASS	0.280
182	GEN	Intermittent	13669	Manchester Methane LLC East Windsor Facility	Rest-of-Pool	CONNECTICUT	0.811
183	GEN	Intermittent	1266	MARSH POWER	Northern New England	MAINE	0.000
184	GEN	Intermittent	840	MARTINSVILLE	Northern New England	VERMONT	0.036
185	GEN	Intermittent	1061	MASCOMA HYDRO	Northern New England	NEWHAMPSHIRE	0.133
186	GEN	Intermittent	38500	Mass Mid-State Solar	Rest-of-Pool	WCMASS	7.110
187	GEN	Intermittent	10998	MASSINNOVATION FITCHBURG	Rest-of-Pool	WCMASS	0.000
188	GEN	Intermittent	38531	Mattapoisett 1	Southeast New England	SEMASS	0.316
189	GEN	Intermittent	38530	Mattapoisett 2	Southeast New England	SEMASS	0.316
190	GEN	Intermittent	2287	MECHANIC FALLS HYDRO	Northern New England	MAINE	0.188
191	GEN	Intermittent	806	MECHANICSVILLE	Rest-of-Pool	CONNECTICUT	0.000
192	GEN	Intermittent	16525	Medway	Northern New England	MAINE	3.443
193	GEN	Intermittent	759	MESSALONSKEE COMPOSITE	Northern New England	MAINE	2.117
194	GEN	Intermittent	793	METHUEN HYDRO	Southeast New England	NEMASSBOST	0.004
195	GEN	Intermittent	1720	MIDDLEBURY LOWER	Northern New England	VERMONT	0.710
196	GEN	Intermittent	779	MIDDLESEX 2	Northern New England	VERMONT	0.815
197	GEN	Intermittent	16296	Milford Hydro	Northern New England	MAINE	5.335
198	GEN	Intermittent	38534	Millbury Solar	Rest-of-Pool	WCMASS	1.638
199	GEN	Intermittent	487	MILLER HYDRO	Northern New England	MAINE	8.124
200	GEN	Intermittent	868	MILTON MILLS HYDRO	Northern New England	NEWHAMPSHIRE	0.297
201	GEN	Intermittent	869	MINE FALLS	Northern New England	NEWHAMPSHIRE	0.543
202	GEN	Intermittent	794	MINIWAWA	Northern New England	NEWHAMPSHIRE	0.142
203	GEN	Intermittent	1109	MMWAC	Northern New England	MAINE	1.848
204	GEN	Intermittent	915	MONADNOCK PAPER MILLS	Northern New England	NEWHAMPSHIRE	0.000
205	GEN	Intermittent	841	MORETOWN 8	Northern New England	VERMONT	0.098
206	GEN	Intermittent	1062	MWRA COSGROVE	Rest-of-Pool	WCMASS	0.883
207	GEN	Intermittent	842	NANTANA MILL	Northern New England	VERMONT	0.033
208	GEN	Intermittent	890	NASHUA HYDRO	Northern New England	NEWHAMPSHIRE	0.216
209	GEN	Intermittent	978	NEW MILFORD	Rest-of-Pool	CONNECTICUT	1.281
210	GEN	Intermittent	843	NEWBURY	Northern New England	VERMONT	0.071
211	GEN	Intermittent	888	NEWFOUND HYDRO	Northern New England	NEWHAMPSHIRE	0.309
212	GEN	Intermittent	772	NEWPORT HYDRO	Northern New England	VERMONT	1.456
213	GEN	Intermittent	38078	NFM Solar Power, LLC	Rest-of-Pool	WCMASS	0.507
214	GEN	Intermittent	922	NOONE FALLS	Northern New England	NEWHAMPSHIRE	0.000

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
215	GEN	Intermittent	760	NORTH GORHAM	Northern New England	MAINE	1.150
216	GEN	Intermittent	11126	NORTH HARTLAND HYDRO	Northern New England	VERMONT	1.403
217	GEN	Intermittent	38582	Norton MA	Southeast New England	SEMASS	0.675
218	GEN	Intermittent	2288	NORWAY HYDRO	Northern New England	MAINE	0.000
219	GEN	Intermittent	857	OAKDALE HYDRO	Rest-of-Pool	WCMASS	2.681
220	GEN	Intermittent	527	OGDEN-MARTIN 1	Southeast New England	NEMASSBOST	39.529
221	GEN	Intermittent	897	OLD NASH DAM	Northern New England	NEWHAMPSHIRE	0.015
222	GEN	Intermittent	854	ORANGE HYDRO 1	Rest-of-Pool	WCMASS	0.017
223	GEN	Intermittent	855	ORANGE HYDRO 2	Rest-of-Pool	WCMASS	0.075
224	GEN	Intermittent	908	OTIS MILL HYDRO	Northern New England	NEWHAMPSHIRE	0.000
225	GEN	Intermittent	844	OTTAUQUECHEE	Northern New England	VERMONT	0.429
226	GEN	Intermittent	925	OTTER LANE HYDRO	Northern New England	NEWHAMPSHIRE	0.008
227	GEN	Intermittent	820	PASSUMPSIC	Northern New England	VERMONT	0.123
228	GEN	Intermittent	814	PATCH	Northern New England	VERMONT	0.006
229	GEN	Intermittent	532	PEJEPSCOT	Northern New England	MAINE	7.293
230	GEN	Intermittent	870	PEMBROKE	Northern New England	NEWHAMPSHIRE	0.323
231	GEN	Intermittent	871	PENNACOOK FALLS LOWER	Northern New England	NEWHAMPSHIRE	1.384
232	GEN	Intermittent	872	PENNACOOK FALLS UPPER	Northern New England	NEWHAMPSHIRE	0.979
233	GEN	Intermittent	948	PEPPERELL HYDRO COMPANY LLC	Rest-of-Pool	WCMASS	0.408
234	GEN	Intermittent	536	PERC-ORRINGTON 1	Northern New England	MAINE	21.406
235	GEN	Intermittent	926	PETERBOROUGH LOWER HYDRO	Northern New England	NEWHAMPSHIRE	0.017
236	GEN	Intermittent	941	PETERBOROUGH UPPER HYDRO	Northern New England	NEWHAMPSHIRE	0.011
237	GEN	Intermittent	10402	PETTYBORO HYDRO U5	Northern New England	NEWHAMPSHIRE	0.000
238	GEN	Intermittent	818	PIERCE MILLS	Northern New England	VERMONT	0.091
239	GEN	Intermittent	809	PINCHBECK	Rest-of-Pool	CONNECTICUT	0.000
240	GEN	Intermittent	2289	PIONEER DAM HYDRO	Northern New England	MAINE	0.075
241	GEN	Intermittent	2290	PITTSFIELD HYDRO	Northern New England	MAINE	0.225
242	GEN	Intermittent	2462	PLAINVILLE GEN QF U5	Southeast New England	SEMASS	2.276
243	GEN	Intermittent	38374	Plymouth	Southeast New England	SEMASS	1.900
244	GEN	Intermittent	539	PONTOOK HYDRO	Northern New England	NEWHAMPSHIRE	4.761
245	GEN	Intermittent	969	POWDER MILL HYDRO	Rest-of-Pool	WCMASS	0.000
246	GEN	Intermittent	14610	Princeton Wind Farm Project	Rest-of-Pool	WCMASS	0.123
247	GEN	Intermittent	541	PROCTOR	Northern New England	VERMONT	2.915
248	GEN	Intermittent	804	PUTNAM	Rest-of-Pool	CONNECTICUT	0.139
249	GEN	Intermittent	873	PUTTS BRIDGE	Rest-of-Pool	WCMASS	0.816
250	GEN	Intermittent	810	QUINEBAUG	Rest-of-Pool	CONNECTICUT	0.266
251	GEN	Intermittent	16642	Railroad Street Revere PV	Southeast New England	NEMASSBOST	0.245
252	GEN	Intermittent	14665	Record Hill Wind	Northern New England	MAINE	5.255
253	GEN	Intermittent	874	RED BRIDGE	Rest-of-Pool	WCMASS	0.578
254	GEN	Intermittent	38579	Rehoboth	Southeast New England	SEMASS	1.093
255	GEN	Intermittent	875	RIVER BEND	Northern New England	NEWHAMPSHIRE	0.592
256	GEN	Intermittent	795	RIVER MILL HYDRO	Northern New England	NEWHAMPSHIRE	0.000
257	GEN	Intermittent	947	RIVERDALE MILLS - QF	Southeast New England	SEMASS	0.000

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
258	GEN	Intermittent	1034	RIVERSIDE 4-7	Rest-of-Pool	WCMASS	1.428
259	GEN	Intermittent	1035	RIVERSIDE 8	Rest-of-Pool	WCMASS	3.180
260	GEN	Intermittent	876	ROBERTSVILLE	Rest-of-Pool	CONNECTICUT	0.000
261	GEN	Intermittent	1368	ROCKY GORGE CORPORATION	Northern New England	MAINE	0.086
262	GEN	Intermittent	906	ROLLINSFORD HYDRO	Northern New England	NEWHAMPSHIRE	0.118
263	GEN	Intermittent	38574	Route 57	Rest-of-Pool	WCMASS	0.739
264	GEN	Intermittent	16643	Rover Street Everett PV	Southeast New England	NEMASSBOST	0.168
265	GEN	Intermittent	10959	RRIG EXPANSION PHASE 2	Southeast New England	RHODEISLAND	1.966
266	GEN	Intermittent	11424	RUMFORD FALLS	Northern New England	MAINE	29.005
267	GEN	Intermittent	2433	RYEGATE 1-NEW	Northern New England	VERMONT	19.000
268	GEN	Intermittent	38173	Saddleback Ridge Wind	Northern New England	MAINE	3.750
269	GEN	Intermittent	928	SALMON BROOK STATION 3	Northern New England	NEWHAMPSHIRE	0.023
270	GEN	Intermittent	883	SALMON FALLS HYDRO	Northern New England	MAINE	0.029
271	GEN	Intermittent	808	SANDY HOOK HYDRO	Rest-of-Pool	CONNECTICUT	0.000
272	GEN	Intermittent	877	SCOTLAND	Rest-of-Pool	CONNECTICUT	0.000
273	GEN	Intermittent	35442	Seaman Energy	Rest-of-Pool	WCMASS	0.285
274	GEN	Intermittent	827	SEARSBURG WIND	Rest-of-Pool	WCMASS	0.198
275	GEN	Intermittent	562	SECREC-PRESTON	Rest-of-Pool	CONNECTICUT	15.984
276	GEN	Intermittent	563	SEMASS 1	Southeast New England	SEMASS	46.955
277	GEN	Intermittent	564	SEMASS 2	Southeast New England	SEMASS	22.500
278	GEN	Intermittent	767	SES CONCORD	Northern New England	NEWHAMPSHIRE	12.111
279	GEN	Intermittent	761	SHAWMUT	Northern New England	MAINE	5.922
280	GEN	Intermittent	12530	Sheffield Wind Farm	Northern New England	VERMONT	2.893
281	GEN	Intermittent	565	SHELDON SPRINGS	Northern New England	VERMONT	4.263
282	GEN	Intermittent	38249	Silver lake Photovoltaic Facility	Rest-of-Pool	WCMASS	0.458
283	GEN	Intermittent	737	SIMPSON G LOAD REDUCER	Northern New England	VERMONT	2.378
284	GEN	Intermittent	878	SKINNER	Rest-of-Pool	WCMASS	0.100
285	GEN	Intermittent	845	SLACK DAM	Northern New England	VERMONT	0.134
286	GEN	Intermittent	570	SMITH	Northern New England	NEWHAMPSHIRE	9.263
287	GEN	Intermittent	822	SMITH (CVPS)	Northern New England	VERMONT	0.475
288	GEN	Intermittent	580	SO. MEADOW 5	Rest-of-Pool	CONNECTICUT	23.674
289	GEN	Intermittent	581	SO. MEADOW 6	Rest-of-Pool	CONNECTICUT	20.576
290	GEN	Intermittent	1107	SOMERSET	Northern New England	MAINE	0.000
291	GEN	Intermittent	852	SOUTH BARRE HYDRO	Rest-of-Pool	WCMASS	0.032
292	GEN	Intermittent	1267	SPARHAWK	Northern New England	MAINE	0.001
293	GEN	Intermittent	35594	Spaulding Pond Hydro	Northern New England	NEWHAMPSHIRE	0.024
294	GEN	Intermittent	2425	SPRINGFIELD REFUSE-NEW	Rest-of-Pool	WCMASS	5.082
295	GEN	Intermittent	35693	Spruce Mountain Wind	Northern New England	MAINE	2.302
296	GEN	Intermittent	909	STEELS POND HYDRO	Northern New England	NEWHAMPSHIRE	0.009
297	GEN	Intermittent	16523	Stillwater	Northern New England	MAINE	1.568
298	GEN	Intermittent	17359	Sugar River 2	Northern New England	NEWHAMPSHIRE	0.014
299	GEN	Intermittent	898	SUGAR RIVER HYDRO	Northern New England	NEWHAMPSHIRE	0.012
300	GEN	Intermittent	889	SUNAPEE HYDRO	Northern New England	NEWHAMPSHIRE	0.123

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
301	GEN	Intermittent	935	SUNNYBROOK HYDRO 2	Northern New England	NEWHAMPSHIRE	0.012
302	GEN	Intermittent	884	SWANS FALLS	Northern New England	NEWHAMPSHIRE	0.335
303	GEN	Intermittent	10409	SWEETWATER HYDRO U5	Northern New England	NEWHAMPSHIRE	0.135
304	GEN	Intermittent	1270	SYSKO STONY BROOK	Northern New England	MAINE	0.016
305	GEN	Intermittent	1271	SYSKO WIGHT BROOK	Northern New England	MAINE	0.003
306	GEN	Intermittent	817	TAFTSVILLE VT	Northern New England	VERMONT	0.012
307	GEN	Intermittent	879	TAFTVILLE CT	Rest-of-Pool	CONNECTICUT	0.187
308	GEN	Intermittent	592	TAMWORTH	Northern New England	NEWHAMPSHIRE	19.498
309	GEN	Intermittent	1225	TANNERY DAM	Rest-of-Pool	WCMASS	0.000
310	GEN	Intermittent	1302	TCPMCMPAGF GEN1 U5	Northern New England	MAINE	0.000
311	GEN	Intermittent	14652	Templeton Wind Turbine	Rest-of-Pool	WCMASS	0.058
312	GEN	Intermittent	37120	Thundermist Hydropower	Southeast New England	RHODEISLAND	0.000
313	GEN	Intermittent	803	TOUTANT	Rest-of-Pool	CONNECTICUT	0.054
314	GEN	Intermittent	38380	Treasure Valley- SE	Rest-of-Pool	WCMASS	2.070
315	GEN	Intermittent	38561	True North	Southeast New England	NEMASSBOST	2.368
316	GEN	Intermittent	813	TUNNEL	Rest-of-Pool	CONNECTICUT	0.360
317	GEN	Intermittent	253	TURNKEY LANDFILL	Northern New England	NEWHAMPSHIRE	0.650
318	GEN	Intermittent	38581	Tyngsborough	Rest-of-Pool	WCMASS	1.283
319	GEN	Intermittent	38375	Uxbridge	Southeast New England	SEMASS	1.230
320	GEN	Intermittent	949	VALLEY HYDRO - QF	Southeast New England	RHODEISLAND	0.017
321	GEN	Intermittent	14623	Valley Hydro (Station No. 5)	Rest-of-Pool	WCMASS	0.239
322	GEN	Intermittent	2435	VERGENNES HYDRO-NEW	Northern New England	VERMONT	1.015
323	GEN	Intermittent	16631	Victory Road Dorchester PV	Southeast New England	NEMASSBOST	0.316
324	GEN	Intermittent	1048	WARE HYDRO	Rest-of-Pool	WCMASS	0.139
325	GEN	Intermittent	901	WATERLOOM FALLS	Northern New England	NEWHAMPSHIRE	0.004
326	GEN	Intermittent	932	WATSON DAM	Northern New England	NEWHAMPSHIRE	0.027
327	GEN	Intermittent	2291	WAVERLY AVENUE HYDRO	Northern New England	MAINE	0.175
328	GEN	Intermittent	853	WEBSTER HYDRO	Rest-of-Pool	WCMASS	0.000
329	GEN	Intermittent	38110	West Brookfield Solar	Rest-of-Pool	WCMASS	0.000
330	GEN	Intermittent	781	WEST DANVILLE 1	Northern New England	VERMONT	0.000
331	GEN	Intermittent	616	WEST ENFIELD	Northern New England	MAINE	10.899
332	GEN	Intermittent	893	WEST HOPKINTON HYDRO	Northern New England	NEWHAMPSHIRE	0.212
333	GEN	Intermittent	10770	WEST SPRINGFIELD HYDRO U5	Rest-of-Pool	WCMASS	0.361
334	GEN	Intermittent	38181	Westford Solar	Rest-of-Pool	WCMASS	1.800
335	GEN	Intermittent	617	WESTON	Northern New England	MAINE	8.733
336	GEN	Intermittent	933	WESTON DAM	Northern New England	NEWHAMPSHIRE	0.229
337	GEN	Intermittent	38576	Whately	Rest-of-Pool	WCMASS	0.617
338	GEN	Intermittent	349	WHEELABRATOR BRIDGEPORT, L.P.	Rest-of-Pool	CONNECTICUT	58.969
339	GEN	Intermittent	547	WHEELABRATOR NORTH ANDOVER	Southeast New England	NEMASSBOST	29.864
340	GEN	Intermittent	801	WILLIMANTIC 1	Rest-of-Pool	CONNECTICUT	0.046
341	GEN	Intermittent	802	WILLIMANTIC 2	Rest-of-Pool	CONNECTICUT	0.012
342	GEN	Intermittent	622	WINOOSKI 1	Northern New England	VERMONT	1.991
343	GEN	Intermittent	846	WINOOSKI 8	Northern New England	VERMONT	0.299

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
344	GEN	Intermittent	38287	WMA Chester Solar 1	Rest-of-Pool	WCMASS	1.904
345	GEN	Intermittent	847	WOODSIDE	Northern New England	VERMONT	0.054
346	GEN	Intermittent	10407	WOODSVILLE HYDRO U5	Northern New England	NEWHAMPSHIRE	0.117
347	GEN	Intermittent	37077	Woronoco Hydro LLC	Rest-of-Pool	WCMASS	0.490
348	GEN	Intermittent	903	WYANDOTTE HYDRO	Northern New England	NEWHAMPSHIRE	0.000
349	GEN	Intermittent	2292	YORK HYDRO	Northern New England	MAINE	0.138
350	GEN	Non Intermittent	463	AEI LIVERMORE	Northern New England	MAINE	34.430
351	GEN	Non Intermittent	326	ALTRESCO	Rest-of-Pool	WCMASS	150.972
352	GEN	Non Intermittent	14271	Ameresco Northampton	Rest-of-Pool	WCMASS	0.748
353	GEN	Non Intermittent	327	AMOSKEAG	Northern New England	NEWHAMPSHIRE	16.781
354	GEN	Non Intermittent	1412	ANP-BELLINGHAM 1	Southeast New England	SEMASS	254.473
355	GEN	Non Intermittent	1415	ANP-BELLINGHAM 2	Southeast New England	SEMASS	247.067
356	GEN	Non Intermittent	1287	ANP-BLACKSTONE ENERGY 2	Southeast New England	SEMASS	250.295
357	GEN	Non Intermittent	1286	ANP-BLACKSTONE ENERGY CO. #1	Southeast New England	SEMASS	239.174
358	GEN	Non Intermittent	329	ASCUTNEY GT	Northern New England	VERMONT	8.503
359	GEN	Non Intermittent	330	AYERS ISLAND	Northern New England	NEWHAMPSHIRE	8.474
360	GEN	Non Intermittent	331	AZISCOHOS HYDRO	Northern New England	MAINE	6.800
361	GEN	Non Intermittent	959	BARTON 1-4 DIESELS	Northern New England	VERMONT	0.586
362	GEN	Non Intermittent	335	BELLOWS FALLS	Northern New England	NEWHAMPSHIRE	48.540
363	GEN	Non Intermittent	1086	BERKSHIRE POWER	Rest-of-Pool	WCMASS	229.279
364	GEN	Non Intermittent	336	BERLIN 1 GT	Northern New England	VERMONT	34.830
365	GEN	Non Intermittent	16653	Berlin Biopower	Northern New England	NEWHAMPSHIRE	65.380
366	GEN	Non Intermittent	16738	BFCP Fuel Cell	Rest-of-Pool	CONNECTICUT	13.054
367	GEN	Non Intermittent	1005	BG DIGHTON POWER LLC	Southeast New England	SEMASS	164.039
368	GEN	Non Intermittent	590	BORALEX STRATTON ENERGY	Northern New England	MAINE	44.363
369	GEN	Non Intermittent	355	BRANFORD 10	Rest-of-Pool	CONNECTICUT	15.840
370	GEN	Non Intermittent	1113	BRASSUA HYDRO	Northern New England	MAINE	4.203
371	GEN	Non Intermittent	1032	BRIDGEPORT ENERGY 1	Rest-of-Pool	CONNECTICUT	476.000
372	GEN	Non Intermittent	340	BRIDGEPORT HARBOR 3	Rest-of-Pool	CONNECTICUT	383.426
373	GEN	Non Intermittent	341	BRIDGEPORT HARBOR 4	Rest-of-Pool	CONNECTICUT	17.024
374	GEN	Non Intermittent	38206	Bridgeport Harbor 5	Rest-of-Pool	CONNECTICUT	484.300
375	GEN	Non Intermittent	1288	BUCKSPORT ENERGY 4	Northern New England	MAINE	160.300
376	GEN	Non Intermittent	1028	BUNKER RD #12 GAS TURB	Southeast New England	SEMASS	2.351
377	GEN	Non Intermittent	1029	BUNKER RD #13 GAS TURB	Southeast New England	SEMASS	2.806
378	GEN	Non Intermittent	363	BURLINGTON GT	Northern New England	VERMONT	19.104
379	GEN	Non Intermittent	38504	Burrillville Energy Center 3	Southeast New England	RHODEISLAND	485.000
380	GEN	Non Intermittent	766	CABOT TURNERS FALLS	Rest-of-Pool	WCMASS	67.881
381	GEN	Non Intermittent	365	CANAL 1	Southeast New England	SEMASS	554.640
382	GEN	Non Intermittent	366	CANAL 2	Southeast New England	SEMASS	545.125
383	GEN	Non Intermittent	38310	Canal 3	Southeast New England	SEMASS	333.000
384	GEN	Non Intermittent	367	CAPE GT 4	Northern New England	MAINE	13.750
385	GEN	Non Intermittent	368	CAPE GT 5	Northern New England	MAINE	15.822
386	GEN	Non Intermittent	369	CATARACT EAST	Northern New England	MAINE	7.775

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
387	GEN	Non Intermittent	324	CDECCA	Rest-of-Pool	CONNECTICUT	55.254
388	GEN	Non Intermittent	2468	CHERRY 10	Rest-of-Pool	WCMASS	2.100
389	GEN	Non Intermittent	2469	CHERRY 11	Rest-of-Pool	WCMASS	2.100
390	GEN	Non Intermittent	2470	CHERRY 12	Rest-of-Pool	WCMASS	4.999
391	GEN	Non Intermittent	2466	CHERRY 7	Rest-of-Pool	WCMASS	2.800
392	GEN	Non Intermittent	2467	CHERRY 8	Rest-of-Pool	WCMASS	3.400
393	GEN	Non Intermittent	2424	CITIZENS BLOCK LOAD	Northern New England	VERMONT	30.000
394	GEN	Non Intermittent	376	CLEARY 8	Southeast New England	SEMASS	22.253
395	GEN	Non Intermittent	375	CLEARY 9 9A CC	Southeast New England	SEMASS	104.931
396	GEN	Non Intermittent	379	COBBLE MOUNTAIN	Rest-of-Pool	WCMASS	31.126
397	GEN	Non Intermittent	380	COMERFORD	Northern New England	NEWHAMPSHIRE	166.135
398	GEN	Non Intermittent	370	COS COB 10	Rest-of-Pool	CONNECTICUT	18.932
399	GEN	Non Intermittent	371	COS COB 11	Rest-of-Pool	CONNECTICUT	18.724
400	GEN	Non Intermittent	372	COS COB 12	Rest-of-Pool	CONNECTICUT	18.660
401	GEN	Non Intermittent	12524	Cos Cob 13&14	Rest-of-Pool	CONNECTICUT	36.000
402	GEN	Non Intermittent	12553	Covanta Haverhill Landfill Gas Engine	Southeast New England	NEMASSBOST	1.188
403	GEN	Non Intermittent	446	COVANTA JONESBORO	Northern New England	MAINE	20.226
404	GEN	Non Intermittent	445	COVANTA WEST ENFIELD	Northern New England	MAINE	20.461
405	GEN	Non Intermittent	38297	CPV_Towantic	Rest-of-Pool	CONNECTICUT	750.500
406	GEN	Non Intermittent	388	DARTMOUTH POWER	Southeast New England	SEMASS	62.149
407	GEN	Non Intermittent	15415	Dartmouth Power Expansion	Southeast New England	SEMASS	19.578
408	GEN	Non Intermittent	465	DEERFIELD 2 LWR DRFIELD	Rest-of-Pool	WCMASS	19.275
409	GEN	Non Intermittent	393	DEERFIELD 5	Rest-of-Pool	WCMASS	13.703
410	GEN	Non Intermittent	389	DERBY DAM	Rest-of-Pool	CONNECTICUT	7.050
411	GEN	Non Intermittent	396	DEVON 10	Rest-of-Pool	CONNECTICUT	14.407
412	GEN	Non Intermittent	397	DEVON 11	Rest-of-Pool	CONNECTICUT	29.299
413	GEN	Non Intermittent	398	DEVON 12	Rest-of-Pool	CONNECTICUT	29.227
414	GEN	Non Intermittent	399	DEVON 13	Rest-of-Pool	CONNECTICUT	29.967
415	GEN	Non Intermittent	400	DEVON 14	Rest-of-Pool	CONNECTICUT	29.704
416	GEN	Non Intermittent	12504	Devon 15-18	Rest-of-Pool	CONNECTICUT	187.589
417	GEN	Non Intermittent	392	DEXTER	Rest-of-Pool	CONNECTICUT	38.000
418	GEN	Non Intermittent	16737	DFC-ERG Hybrid Fuel Cell (3)	Rest-of-Pool	CONNECTICUT	2.500
419	GEN	Non Intermittent	395	DOREEN	Rest-of-Pool	WCMASS	15.820
420	GEN	Non Intermittent	401	EASTMAN FALLS	Northern New England	NEWHAMPSHIRE	5.582
421	GEN	Non Intermittent	407	EASTPORT DIESELS 1-3	Northern New England	MAINE	2.000
422	GEN	Non Intermittent	405	ELLSWORTH HYDRO	Northern New England	MAINE	9.044
423	GEN	Non Intermittent	1649	EP Newington Energy, LLC	Northern New England	NEWHAMPSHIRE	522.014
424	GEN	Non Intermittent	1221	ESSEX DIESELS	Northern New England	VERMONT	7.215
425	GEN	Non Intermittent	12108	FIEC DIESEL	Northern New England	MAINE	1.540
426	GEN	Non Intermittent	35485	Fitchburg-FCA-5	Rest-of-Pool	WCMASS	3.093
427	GEN	Non Intermittent	38089	Footprint Combined Cycle	Southeast New England	NEMASSBOST	674.000
428	GEN	Non Intermittent	1691	FORE RIVER-1	Southeast New England	SEMASS	708.000
429	GEN	Non Intermittent	417	FRAMINGHAM JET 1	Southeast New England	NEMASSBOST	10.145

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
430	GEN	Non Intermittent	418	FRAMINGHAM JET 2	Southeast New England	NEMASSBOST	10.049
431	GEN	Non Intermittent	419	FRAMINGHAM JET 3	Southeast New England	NEMASSBOST	11.250
432	GEN	Non Intermittent	420	FRANKLIN DRIVE 10	Rest-of-Pool	CONNECTICUT	15.417
433	GEN	Non Intermittent	421	FRONT STREET DIESELS 1-3	Rest-of-Pool	WCMASS	7.433
434	GEN	Non Intermittent	10880	GE LYNN EXCESS REPLACEMENT	Southeast New England	NEMASSBOST	0.000
435	GEN	Non Intermittent	796	GOODWIN DAM	Rest-of-Pool	CONNECTICUT	3.000
436	GEN	Non Intermittent	426	GORGE 1 DIESEL	Northern New England	VERMONT	7.090
437	GEN	Non Intermittent	1625	GRANITE RIDGE ENERGY	Northern New England	NEWHAMPSHIRE	675.675
438	GEN	Non Intermittent	424	GREAT LAKES - MILLINOCKET	Northern New England	MAINE	71.822
439	GEN	Non Intermittent	1432	GRS-FALL RIVER	Southeast New England	SEMASS	3.028
440	GEN	Non Intermittent	328	GULF ISLAND COMPOSITE Incremental	Northern New England	MAINE	33.440
441	GEN	Non Intermittent	435	HARRIMAN	Rest-of-Pool	WCMASS	38.663
442	GEN	Non Intermittent	432	HARRIS 1	Northern New England	MAINE	16.776
443	GEN	Non Intermittent	433	HARRIS 2	Northern New England	MAINE	34.500
444	GEN	Non Intermittent	434	HARRIS 3	Northern New England	MAINE	33.905
445	GEN	Non Intermittent	757	HARRIS 4	Northern New England	MAINE	1.249
446	GEN	Non Intermittent	440	HIRAM	Northern New England	MAINE	11.189
447	GEN	Non Intermittent	1631	Indeck-Energy Alexandria, LLC	Northern New England	NEWHAMPSHIRE	15.031
448	GEN	Non Intermittent	448	IPSWICH DIESELS	Southeast New England	NEMASSBOST	9.495
449	GEN	Non Intermittent	474	J C MCNEIL	Northern New England	VERMONT	52.000
450	GEN	Non Intermittent	359	J. COCKWELL 1	Rest-of-Pool	WCMASS	284.100
451	GEN	Non Intermittent	360	J. COCKWELL 2	Rest-of-Pool	WCMASS	286.880
452	GEN	Non Intermittent	449	JACKMAN	Northern New England	NEWHAMPSHIRE	3.541
453	GEN	Non Intermittent	1672	KENDALL CT	Southeast New England	NEMASSBOST	153.533
454	GEN	Non Intermittent	452	KENDALL JET 1	Southeast New England	NEMASSBOST	18.000
455	GEN	Non Intermittent	37040	KENDALL STEAM	Southeast New England	NEMASSBOST	27.750
456	GEN	Non Intermittent	14706	Kimberly-Clark Corp Energy Independence Project	Rest-of-Pool	CONNECTICUT	13.016
457	GEN	Non Intermittent	14614	Kleen Energy	Rest-of-Pool	CONNECTICUT	620.000
458	GEN	Non Intermittent	466	L STREET JET	Southeast New England	NEMASSBOST	16.030
459	GEN	Non Intermittent	1342	LAKE ROAD 1	Rest-of-Pool	CONNECTICUT	259.792
460	GEN	Non Intermittent	1343	LAKE ROAD 2	Rest-of-Pool	CONNECTICUT	265.213
461	GEN	Non Intermittent	1344	LAKE ROAD 3	Rest-of-Pool	CONNECTICUT	269.000
462	GEN	Non Intermittent	464	LOST NATION	Northern New England	NEWHAMPSHIRE	13.979
463	GEN	Non Intermittent	12521	Lowell Power Reactivation	Rest-of-Pool	WCMASS	74.000
464	GEN	Non Intermittent	774	LOWER LAMOILLE COMPOSITE	Northern New England	VERMONT	15.800
465	GEN	Non Intermittent	472	M STREET JET	Southeast New England	NEMASSBOST	47.000
466	GEN	Non Intermittent	1216	MAINE INDEPENDENCE STATION	Northern New England	MAINE	488.276
467	GEN	Non Intermittent	321	MANCHESTER 10 10A CC	Southeast New England	RHODEISLAND	149.000
468	GEN	Non Intermittent	322	MANCHESTER 11 11A CC	Southeast New England	RHODEISLAND	149.000
469	GEN	Non Intermittent	323	MANCHESTER 9 9A CC	Southeast New England	RHODEISLAND	149.000
470	GEN	Non Intermittent	467	MARBLEHEAD DIESELS	Southeast New England	NEMASSBOST	5.000

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
471	GEN	Non Intermittent	468	MARSHFIELD 6 HYDRO	Northern New England	VERMONT	4.380
472	GEN	Non Intermittent	497	MASS POWER	Rest-of-Pool	WCMASS	245.259
473	GEN	Non Intermittent	38182	MAT-2 (MATEP Combined Cycle)	Southeast New England	NEMASSBOST	13.850
474	GEN	Non Intermittent	14087	MAT3	Southeast New England	NEMASSBOST	14.340
475	GEN	Non Intermittent	13675	MATEP (COMBINED CYCLE)	Southeast New England	NEMASSBOST	42.515
476	GEN	Non Intermittent	13673	MATEP (DIESEL)	Southeast New England	NEMASSBOST	17.120
477	GEN	Non Intermittent	473	MCINDOES	Northern New England	NEWHAMPSHIRE	10.066
478	GEN	Non Intermittent	38289	Medway Peaker - SEMARI	Southeast New England	SEMASS	194.800
479	GEN	Non Intermittent	489	MERRIMACK 1	Northern New England	NEWHAMPSHIRE	108.000
480	GEN	Non Intermittent	490	MERRIMACK 2	Northern New England	NEWHAMPSHIRE	330.000
481	GEN	Non Intermittent	382	MERRIMACK CT1	Northern New England	NEWHAMPSHIRE	16.826
482	GEN	Non Intermittent	383	MERRIMACK CT2	Northern New England	NEWHAMPSHIRE	16.804
483	GEN	Non Intermittent	775	MIDDLEBURY COMPOSITE	Northern New England	VERMONT	5.678
484	GEN	Non Intermittent	478	MIDDLETOWN 10	Rest-of-Pool	CONNECTICUT	15.515
485	GEN	Non Intermittent	12505	Middletown 12-15	Rest-of-Pool	CONNECTICUT	187.600
486	GEN	Non Intermittent	480	MIDDLETOWN 2	Rest-of-Pool	CONNECTICUT	117.000
487	GEN	Non Intermittent	481	MIDDLETOWN 3	Rest-of-Pool	CONNECTICUT	233.679
488	GEN	Non Intermittent	482	MIDDLETOWN 4	Rest-of-Pool	CONNECTICUT	399.923
489	GEN	Non Intermittent	486	MILFORD POWER	Southeast New England	SEMASS	149.000
490	GEN	Non Intermittent	1385	Milford Power 1 Incremental	Rest-of-Pool	CONNECTICUT	267.610
491	GEN	Non Intermittent	1386	MILFORD POWER 2	Rest-of-Pool	CONNECTICUT	267.093
492	GEN	Non Intermittent	1210	MILLENNIUM	Rest-of-Pool	WCMASS	331.000
493	GEN	Non Intermittent	484	MILLSTONE POINT 2	Rest-of-Pool	CONNECTICUT	872.258
494	GEN	Non Intermittent	485	MILLSTONE POINT 3	Rest-of-Pool	CONNECTICUT	1,225.000
495	GEN	Non Intermittent	14134	MONTAGNE FARM	Northern New England	VERMONT	0.064
496	GEN	Non Intermittent	492	MONTVILLE 10 and 11	Rest-of-Pool	CONNECTICUT	5.296
497	GEN	Non Intermittent	493	MONTVILLE 5	Rest-of-Pool	CONNECTICUT	81.000
498	GEN	Non Intermittent	494	MONTVILLE 6	Rest-of-Pool	CONNECTICUT	405.050
499	GEN	Non Intermittent	495	MONTY	Northern New England	MAINE	28.000
500	GEN	Non Intermittent	496	MOORE	Northern New England	NEWHAMPSHIRE	189.032
501	GEN	Non Intermittent	35728	Moretown LG	Northern New England	VERMONT	3.008
502	GEN	Non Intermittent	502	MYSTIC 7	Southeast New England	NEMASSBOST	570.800
503	GEN	Non Intermittent	1478	MYSTIC 8	Southeast New England	NEMASSBOST	703.324
504	GEN	Non Intermittent	1616	MYSTIC 9	Southeast New England	NEMASSBOST	709.676
505	GEN	Non Intermittent	503	MYSTIC JET	Southeast New England	NEMASSBOST	8.589
506	GEN	Non Intermittent	776	N. RUTLAND COMPOSITE	Northern New England	VERMONT	4.360
507	GEN	Non Intermittent	507	NEA BELLINGHAM	Southeast New England	SEMASS	272.865
508	GEN	Non Intermittent	10308	NECCO COGENERATION FACILITY	Southeast New England	NEMASSBOST	4.743
509	GEN	Non Intermittent	513	NEW HAVEN HARBOR	Rest-of-Pool	CONNECTICUT	447.894
510	GEN	Non Intermittent	15477	New Haven Harbor Units 2, 3, & 4	Rest-of-Pool	CONNECTICUT	129.600
511	GEN	Non Intermittent	508	NEWINGTON 1	Northern New England	NEWHAMPSHIRE	400.200
512	GEN	Non Intermittent	16688	Nor1	Rest-of-Pool	CONNECTICUT	1.789
513	GEN	Non Intermittent	16750	Norden #2	Rest-of-Pool	CONNECTICUT	1.947

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
514	GEN	Non Intermittent	16752	Norden #3	Rest-of-Pool	CONNECTICUT	1.942
515	GEN	Non Intermittent	14217	NORTHFIELD MOUNTAIN 1	Rest-of-Pool	WCMASS	292.000
516	GEN	Non Intermittent	14218	NORTHFIELD MOUNTAIN 2	Rest-of-Pool	WCMASS	292.000
517	GEN	Non Intermittent	14219	NORTHFIELD MOUNTAIN 3	Rest-of-Pool	WCMASS	292.000
518	GEN	Non Intermittent	14220	NORTHFIELD MOUNTAIN 4	Rest-of-Pool	WCMASS	292.000
519	GEN	Non Intermittent	515	NORWICH JET	Rest-of-Pool	CONNECTICUT	15.255
520	GEN	Non Intermittent	1030	OAK BLUFFS	Southeast New England	SEMASS	7.471
521	GEN	Non Intermittent	528	OCEAN ST PWR GT1 GT2 ST1	Southeast New England	RHODEISLAND	270.901
522	GEN	Non Intermittent	529	OCEAN ST PWR GT3 GT4 ST2	Southeast New England	RHODEISLAND	270.180
523	GEN	Non Intermittent	531	PAWTUCKET POWER	Southeast New England	RHODEISLAND	52.954
524	GEN	Non Intermittent	12526	Pierce	Rest-of-Pool	CONNECTICUT	74.085
525	GEN	Non Intermittent	538	PINETREE POWER	Rest-of-Pool	WCMASS	15.783
526	GEN	Non Intermittent	15509	Plainfield Renewable Energy	Rest-of-Pool	CONNECTICUT	36.464
527	GEN	Non Intermittent	540	POTTER 2 CC	Southeast New England	SEMASS	72.558
528	GEN	Non Intermittent	1376	PPL WALLINGFORD UNIT 1	Rest-of-Pool	CONNECTICUT	43.473
529	GEN	Non Intermittent	1377	PPL WALLINGFORD UNIT 2	Rest-of-Pool	CONNECTICUT	43.019
530	GEN	Non Intermittent	1378	PPL WALLINGFORD UNIT 3	Rest-of-Pool	CONNECTICUT	44.566
531	GEN	Non Intermittent	1379	PPL WALLINGFORD UNIT 4	Rest-of-Pool	CONNECTICUT	43.157
532	GEN	Non Intermittent	1380	PPL WALLINGFORD UNIT 5	Rest-of-Pool	CONNECTICUT	44.425
533	GEN	Non Intermittent	35658	Rainbow_1	Rest-of-Pool	CONNECTICUT	4.100
534	GEN	Non Intermittent	35656	Rainbow_2	Rest-of-Pool	CONNECTICUT	4.100
535	GEN	Non Intermittent	546	RESCO SAUGUS	Southeast New England	NEMASSBOST	30.114
536	GEN	Non Intermittent	14599	Rhode Island LFG Genco, LLC - ST	Southeast New England	RHODEISLAND	26.000
537	GEN	Non Intermittent	1630	RISEP	Southeast New England	RHODEISLAND	540.798
538	GEN	Non Intermittent	715	ROCHESTER LANDFILL	Northern New England	NEWHAMPSHIRE	2.192
539	GEN	Non Intermittent	739	ROCKY RIVER	Rest-of-Pool	CONNECTICUT	28.383
540	GEN	Non Intermittent	1255	RUMFORD POWER	Northern New England	MAINE	244.281
541	GEN	Non Intermittent	549	RUTLAND 5 GT	Northern New England	VERMONT	7.919
542	GEN	Non Intermittent	591	S.D. WARREN-WESTBROOK	Northern New England	MAINE	42.590
543	GEN	Non Intermittent	556	SCHILLER 4	Northern New England	NEWHAMPSHIRE	47.500
544	GEN	Non Intermittent	557	SCHILLER 5	Northern New England	NEWHAMPSHIRE	42.594
545	GEN	Non Intermittent	558	SCHILLER 6	Northern New England	NEWHAMPSHIRE	47.820
546	GEN	Non Intermittent	559	SCHILLER CT 1	Northern New England	NEWHAMPSHIRE	17.621
547	GEN	Non Intermittent	555	SEABROOK	Northern New England	NEWHAMPSHIRE	1,246.650
548	GEN	Non Intermittent	561	SEARSBURG	Rest-of-Pool	WCMASS	4.755
549	GEN	Non Intermittent	566	SHEPAUG	Rest-of-Pool	CONNECTICUT	41.511
550	GEN	Non Intermittent	567	SHERMAN	Rest-of-Pool	WCMASS	6.154
551	GEN	Non Intermittent	35657	Shrewsbury Diesels	Rest-of-Pool	WCMASS	13.650
552	GEN	Non Intermittent	569	SKELTON	Northern New England	MAINE	21.600
553	GEN	Non Intermittent	572	SO. MEADOW 11	Rest-of-Pool	CONNECTICUT	35.781
554	GEN	Non Intermittent	573	SO. MEADOW 12	Rest-of-Pool	CONNECTICUT	37.649
555	GEN	Non Intermittent	574	SO. MEADOW 13	Rest-of-Pool	CONNECTICUT	38.317
556	GEN	Non Intermittent	575	SO. MEADOW 14	Rest-of-Pool	CONNECTICUT	36.746

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
557	GEN	Non Intermittent	38178	Southbridge Landfill Gas to Energy 17-18	Rest-of-Pool	WCMASS	2.400
558	GEN	Non Intermittent	587	STEVENSON	Rest-of-Pool	CONNECTICUT	28.311
559	GEN	Non Intermittent	583	STONY BROOK 2A	Rest-of-Pool	WCMASS	67.000
560	GEN	Non Intermittent	584	STONY BROOK 2B	Rest-of-Pool	WCMASS	65.000
561	GEN	Non Intermittent	1185	STONY BROOK GT1A	Rest-of-Pool	WCMASS	103.167
562	GEN	Non Intermittent	1186	STONY BROOK GT1B	Rest-of-Pool	WCMASS	99.932
563	GEN	Non Intermittent	1187	STONY BROOK GT1C	Rest-of-Pool	WCMASS	103.167
564	GEN	Non Intermittent	12510	Swanton Gas Turbine 1	Northern New England	VERMONT	19.304
565	GEN	Non Intermittent	12511	Swanton Gas Turbine 2	Northern New England	VERMONT	19.349
566	GEN	Non Intermittent	12500	Thomas A. Watson	Southeast New England	SEMASS	105.200
567	GEN	Non Intermittent	1226	TIVERTON POWER	Southeast New England	RHODEISLAND	267.424
568	GEN	Non Intermittent	595	TORRINGTON TERMINAL 10	Rest-of-Pool	CONNECTICUT	15.638
569	GEN	Non Intermittent	596	TUNNEL 10	Rest-of-Pool	CONNECTICUT	16.591
570	GEN	Non Intermittent	38441	UI RCP BGPT FC	Rest-of-Pool	CONNECTICUT	2.520
571	GEN	Non Intermittent	38442	UI RCP NH FC	Rest-of-Pool	CONNECTICUT	2.520
572	GEN	Non Intermittent	12509	UNH Power Plant	Northern New England	NEWHAMPSHIRE	2.000
573	GEN	Non Intermittent	598	VERGENNES 5 and 6 DIESELS	Northern New England	VERMONT	3.940
574	GEN	Non Intermittent	599	VERNON	Rest-of-Pool	WCMASS	32.000
575	GEN	Non Intermittent	13703	Verso VCG1	Northern New England	MAINE	42.606
576	GEN	Non Intermittent	13704	Verso VCG2	Northern New England	MAINE	44.826
577	GEN	Non Intermittent	13705	Verso VCG3	Northern New England	MAINE	42.681
578	GEN	Non Intermittent	38278	Wallingford Unit 6 and Unit 7	Rest-of-Pool	CONNECTICUT	90.000
579	GEN	Non Intermittent	614	WATERBURY 22	Northern New England	VERMONT	5.000
580	GEN	Non Intermittent	12564	Waterbury Generation Facility	Rest-of-Pool	CONNECTICUT	96.349
581	GEN	Non Intermittent	612	WATERS RIVER JET 1	Southeast New England	NEMASSBOST	15.974
582	GEN	Non Intermittent	613	WATERS RIVER JET 2	Southeast New England	NEMASSBOST	29.889
583	GEN	Non Intermittent	11842	WATERSIDE POWER	Rest-of-Pool	CONNECTICUT	70.017
584	GEN	Non Intermittent	625	WEST MEDWAY JET 1	Southeast New England	NEMASSBOST	42.000
585	GEN	Non Intermittent	626	WEST MEDWAY JET 2	Southeast New England	NEMASSBOST	39.848
586	GEN	Non Intermittent	627	WEST MEDWAY JET 3	Southeast New England	SEMASS	35.441
587	GEN	Non Intermittent	630	WEST SPRINGFIELD 10	Rest-of-Pool	WCMASS	17.143
588	GEN	Non Intermittent	633	WEST SPRINGFIELD 3	Rest-of-Pool	WCMASS	94.276
589	GEN	Non Intermittent	1693	WEST SPRINGFIELD GT-1	Rest-of-Pool	WCMASS	36.908
590	GEN	Non Intermittent	1694	WEST SPRINGFIELD GT-2	Rest-of-Pool	WCMASS	37.441
591	GEN	Non Intermittent	1031	WEST TISBURY	Southeast New England	SEMASS	5.005
592	GEN	Non Intermittent	1345	WESTBROOK	Northern New England	MAINE	530.000
593	GEN	Non Intermittent	619	WHITE LAKE JET	Northern New England	NEWHAMPSHIRE	17.447
594	GEN	Non Intermittent	620	WILDER	Northern New England	NEWHAMPSHIRE	39.083
595	GEN	Non Intermittent	621	WILLIAMS	Northern New England	MAINE	14.900
596	GEN	Non Intermittent	624	WMI MILLBURY 1	Rest-of-Pool	WCMASS	39.811
597	GEN	Non Intermittent	14663	WMRE Crossroads	Northern New England	MAINE	2.628
598	GEN	Non Intermittent	628	WOODLAND ROAD	Rest-of-Pool	WCMASS	15.808

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
599	GEN	Non Intermittent	636	WYMAN HYDRO 1	Northern New England	MAINE	28.500
600	GEN	Non Intermittent	637	WYMAN HYDRO 2	Northern New England	MAINE	29.866
601	GEN	Non Intermittent	638	WYMAN HYDRO 3	Northern New England	MAINE	26.520
602	GEN	Non Intermittent	639	YARMOUTH 1	Northern New England	MAINE	50.328
603	GEN	Non Intermittent	640	YARMOUTH 2	Northern New England	MAINE	50.805
604	GEN	Non Intermittent	641	YARMOUTH 3	Northern New England	MAINE	110.870
605	GEN	Non Intermittent	642	YARMOUTH 4	Northern New England	MAINE	602.050
COUNT OF GENERATION: 605					**SUBTOTAL GENERATION MW: 31,507.020**		

PUBLIC VERSION

Item #	Resource Type	Resource Sub-type	Resource ID	Resource Name	Capacity Zone	Load Zone/ Interface Name	FCA Qualified Capacity (MW)
1	IMPORT	Resource Backed	12450	NYPA - CMR	Rest-of-Pool		68.800
2	IMPORT	Resource Backed	12451	NYPA - VT	Rest-of-Pool		14.000
3	IMPORT	Resource Backed	12452	VJO - Highgate	Northern New England		0.000
COUNT OF IMPORT: 3					**SUBTOTAL IMPORT MW: 82.800**		

PUBLIC VERSION

Attachment D: New Generating, Import and Demand Resource Capacity

REDACTED

CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

Attachment E: Summary of all Static, Export and Administrative Export De-List Bids Submitted

REDACTED

CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

Attachment F: Major Elements In The Determination of Expected Net Revenues – Generation

REDACTED

CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

Attachment G: Major Elements In The Determination of Expected Net Revenues – Generation

REDACTED

CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

Attachment H: Major Elements In The Determination of Expected Net Revenues – Demand Resources

REDACTED

CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

PUBLIC VERSION

Attachment I: Notifications Sent to Resources That Were Not Qualified to Participant in the FCA

REDACTED

CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE

Proposed Installed Capacity Requirement (ICR) Values for the 2020-2021 Forward Capacity Auction (FCA11)

(Revised)

Maria Scibelli

Objective of this Presentation

- Review the Committee voting and FERC filing schedules
- Review the proposed ICR Values* revisions including:
  - *Installed Capacity Requirement (ICR)*
  - *For the Southeast New England (SENE) Capacity Zone (combined Load Zones of NEMA/Boston, SEMA and RI)***
    - Transmission Security Analysis (TSA),
    - Local Resource Adequacy Requirement (LRA),
    - Local Sourcing Requirement (LSR)
  - *For the Northern New England (NNE) Capacity Zone (combined Load Zones of Maine, New Hampshire and Vermont)***
    - Maximum Capacity Limit (MCL)
  - *Marginal Reliability Impact Demand Curves (MRI Demand Curves) – See separate presentation*
- Review assumptions that have been discussed at the May - August PSPC Meetings, if needed

*The ICR, LSR, MCL and the Demand Curves are collectively called the ICR Values

** Presentation of the Capacity Zone determination is available at: http://www.iso-ne.com/static-assets/documents/2016/05/PSPC_FCA11_Zone_Formation.pdf

ICR Review and FERC Filing Schedule (Revised)

- ICR for 2020-2021 Forward Capacity Auction (FCA11)
  - PSPC review of Capacity Zone determinations – **May 26, 2016**
  - PSPC final review of all assumptions – **Jun 30, 2016**
  - PSPC review of ISO recommendation of ICR Values – **Aug 25, 2016**
  - RC review/vote of ISO recommendation of revised ICR Values – **Oct 4, 2016**
  - PC review/vote of ISO recommendation of ICR Values – **Oct 14, 2016**
  - File with the FERC – **by Nov 8, 2016**
  - FCA11 begins – **Feb 6, 2017**

PROPOSED ICR VALUES FOR THE 2020-2021 FCA (FCA11)

ISO Proposed ICR Values for the 2020-2021 FCA (MW) (Revised)

2020-2021 FCA	New England	Southeast New England	Northern New England
Peak Load (50/50)	29,601	12,153	5,882
Existing Capacity Resources	34,389	11,403	8,243
Installed Capacity Requirement	35,034		
NET ICR (ICR Minus 959 MW HQICCs)	34,075		
Local Sourcing Requirement		9,810	
Maximum Capacity Limit			8,980

- Existing Capacity Resources are the Existing Qualified capacity resources for FCA11 at the time of the calculation and reflects retirements and terminations.

Comparison of ICR Values (MW) (Revised) - 2020-2021 (FCA11) Vs 2019-2020 (FCA10)

	New England		Southeast New England		Northern New England	
	2020-2021 FCA	2019-2020 FCA	2020-2021 FCA	2019-2020 FCA	2020-2021 FCA	2019-2020 FCA
Peak Load (50/50)	29,601	29,861	12,153	12,282	5,882	-
Existing Capacity Resources	34,389	33,484	11,403	11,194	8,243	-
Installed Capacity Requirement	35,034	35,126				
NET ICR (ICR Minus HQICCs)	34,075	34,151				
Local Resource Adequacy Requirement			9,580	9,584		
Transmission Security Analysis Requirement			9,810	10,028		
Local Sourcing Requirement			9,810	10,028		
Maximum Capacity Limit					8,980	-

- Existing Capacity Resources are the Existing Qualified capacity resources for FCA11 at the time of the calculation and reflect retirements and terminations.
- For details on the FCA10 (2019-2020) ICR Values calculation see: http://www.iso-ne.com/static-assets/documents/2015/09/a9_icr_results.pdf.

ICR Calculation Details (Revised)

Total Capacity Breakdown	2020-2021 FCA ICR
Generating Resources	31,375
Demand Resources	2,926
Import Resources	89
Tie Benefits	1,950
OP4 - Action 6 & 8 (Voltage Reduction)	437
Minimum Reserve Requirement	(200)
Proxy Unit Capacity	-
Total Capacity	**36,576**

Installed Capacity Requirement Calculation Details	2020-2021 FCA ICR
Annual Peak	29,601
Total Capacity	36,576
Tie Benefits	1,950
HQICCs	959
OP4 - Action 6 & 8 (Voltage Reduction)	437
Minimum Operating Reserve Requirement	(200)
ALCC	273
Installed Capacity Requirement	**35,034**
Net ICR	**34,075**
Reserve Margin with HQICCs	18.4%
Reserve Margin without HQICCs	15.1%

$$Installed\ \ Capacity\ Requirement\ (ICR) = \frac{Capacity - Tie\ Benefits - OP4\ Load\ Relief}{1 + \frac{ALCC}{APk}} + HQICCs$$

- All values in the table are in MW except the Reserve Margin shown in percent.
- ALCC is the "Additional Load Carrying Capability" used to bring the system to the target Reliability Criterion.

Cost of New Entry (CONE)

- for the Demand Curve

- CONE for the Cap of the Demand Curve for FCA11 has been calculated as:
  - CONE = $14.387/kW-month
  - Net CONE = $11.640/kW-month
  - FCA11 Starting Price = $18.624/kW-month (1.6 x Net Cone)

- See link for Forward Capacity Market (FCM) parameters by Capacity Commitment Period (CCP):

http://www.iso-ne.com/markets-operations/markets/forward-capacity-market

Effect of Updated Assumptions on ICR (Revised)

Assumption	2020-2021 FCA11		2019-2020 FCA10		Effect on ICR (MW)
Tie Benefits	356 MW New York		354 MW New York		22
	500 MW Maritimes		519 MW Maritimes		
	959 MW Quebec (HQICCs)		975 MW Quebec (HQICCs)		
	145 MW Quebec via Highgate		142 MW Quebec via Highgate		
Total	1,950 MW*		1,990 MW		
	MW	Weighted Forced Outage	MW	Weighted Forced Outage	
Generation & IPR	31,375	6.9%	30,524	6.7%	101
Demand Resources	2,926	1.8%	2,871	2.5%	-18
Imports	89	0.0%	89	0.0%	-
	MW		MW		
Load Forecast - Reference	29,601		29,861		-189
	MW	%	MW	%	
OP 4 5% VR	437	1.50%	442	1.50%	2
	MW		MW		
ICR	35,034		35,126		-92

- Methodology: Using the model associated with the 2019-2020 FCA ICR calculation, change one assumption at a time and note the change in ICR.
- * For the tie benefits assumption, the difference in Net ICR is 38 MW
- Demand Resource Weighted Forced Outage assumption is based on the historical performance of DR resources during OP 4 events and audits
- Overall 0.7% increase in DR performance; 0.4% is improvement in actual performance based on historical average while 0.3% is due to changing DR active and passive resource mix
- Generation Forced Outage assumption is a weighted average of individual generator's 5-year average EFORd and Intermittent resources rated as 100% available.
- While there is a decrease in 50/50 peak load forecast of 260 MW, there is an increase in ICR of 86 MW due to load forecast uncertainty moments in the 2016 versus 2015 CELT load forecast

LRA – SENE (Revised)

Local Resource Adequacy Requirement - SENE			
Southeast New England Capacity Zone		**2020-2021 FCA**	**2019-2020 FCA**
$Resource_z$	[1]	11,403	11,194
$Proxy\ Units_z$	[2]	0	0
$Firm\ Load\ Adjustment_z$	[3]	1,669	1,482
FOR_z	[4]	0.085	0.079
LRA_z	[5]=[1]+[2]-([3]/(1-[4]))	**9,580**	**9,584**
Rest of New England Zone			
Resource	[6]	22,986	22,290
Proxy Units	[7]	0	800
Firm Load Adjustment	[8] = -[3]	-1,669	-1,482
Total System Resources	[9]=[1]+[2]-[3]+[6]+[7]-[8]	34,389	34,284

- All values in the table are in MW except the Forced Outage Rate$_z$ (FOR_z)

TSA Requirement (MW) – SENE (Revised)

Sub-area 2016 90/10 Load*	13,190
Reserves (Largest unit or loss of import capability)	1,413
Sub-area Transmission Security Need	**14,603**
Existing Resources**	11,403
Assumed Unavailable Capacity	-1,054
Sub-area N-1 Import Limit	5,700
Sub-area Available Resources	**16,049**
TSA Requirement	**9,810**

**Behind the Meter (BTM) PV is modeled as a reduction to the load forecast*

***The 2020-21 Qualified Existing Capacity is adjusted for the retirement de-list bid(s)*

NOTE: All values have been rounded off to the nearest whole number

See the August 25, 2016 PSPC presentation for more information on the TSA calculation at: http://www.iso-ne.com/static-assets/documents/2016/08/PSPC08252016_FCA11_TSA_Reqt.pdf

TSA Requirements Comparison (MW) – SENE (Revised)

TSA Requirements - SENE	2020-2021 FCA 11	2019-2020 FCA10
Sub-area 2016 90/10 Load*	13,190	13,342
Reserves (Largest unit or loss of import capability)	1,413	1,413
Sub-area Transmission Security Need	**14,603**	**14,755**
Existing Resources	11,403	11,194
Assumed Unavailable Capacity	-1,054	-1,086
Sub-area N-1 Import Limit	5,700	5,700
Sub-area Available Resources	**16,049**	**15,808**
TSA Requirement	**9,810**	**10,028**

**Behind the Meter (BTM) PV is modeled as a reduction to the load forecast*

NOTE: All values have been rounded off to the nearest whole number

Information on the FCA10 TSA calculation available at: http://www.iso-ne.com/static-assets/documents/2015/08/pspc_082715_a3.1_fca10_tsa_reqt.pdf

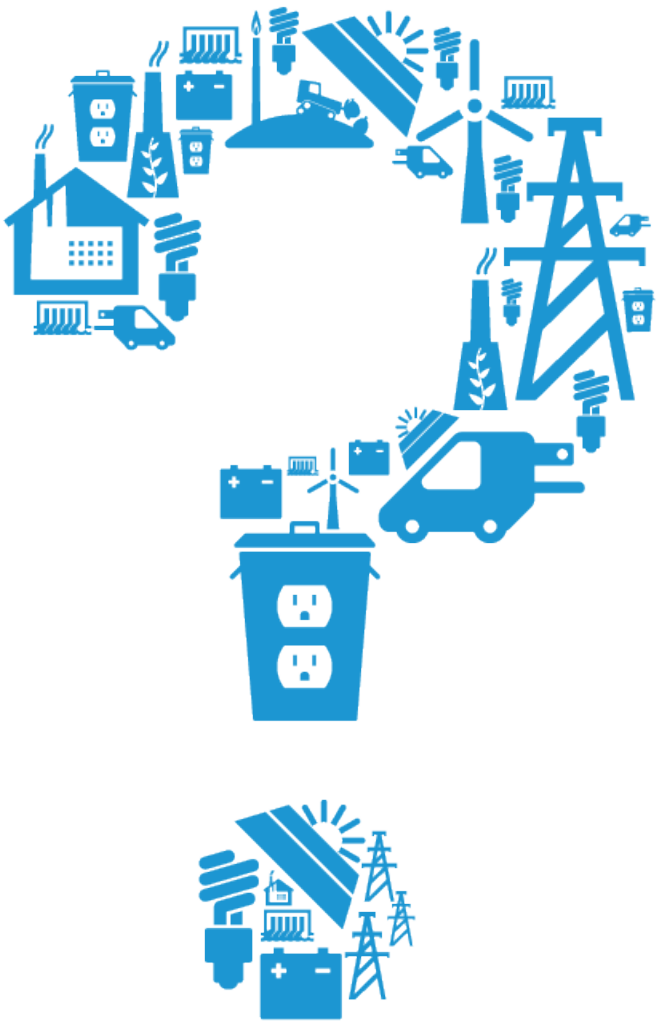
MCL – NNE (Revised)

LRA - RestofNewEngland (for NNE MCL calculation)		
Rest of New England Zone		**2020-2021 FCA**
$Resource_z$	[1]	26,147
$Proxy\ Units_z$	[2]	0
$Surplus\ Capacity\ Adjustment_z$	[3]	305
$Firm\ Load\ Adjustment_z$	[4]	671
FOR_z	[5]	0.072
LRA_z	[6]=[1]+[2]-([3]/(1-[5]))-([4]/(1-[5]))	**25,095**
NNE Zone		
Resource	[7]	8,243
Proxy Units	[8]	0
Surplus Capacity Adjustment	[9]	0
Firm Load Adjustment	[10] = -[4]	-671
Total System Resources	[11]=[1]+[2]-[3]-[4]+[7]+[8]-[9]-[10]	34,389

Maximum Capacity Limit - NNE		
Commitment Period		**2020-2021 FCA**
NICR for New England	[1]	34,075
$LRA_{RestofNewEngland}$	[2]	25,095
$Maximum\ Capacity\ Limit_Y$	[3]=[1]-[2]	**8,980**

- All values in the table are in MW except the FOR_z
- Resources shown for NNE does not include any capacity imports that qualify as “New” every year. For FCA11, the remaining import capability into NNE on the New Brunswick and Highgate interfaces is 249 MW after accounting for tie benefits and existing imports

Questions



Assumptions for the 2020-2021 FCA ICR Values Calculation

Modeling the New England Control Area

The GE MARS model is used to calculate the ICR and related Values

- Internal transmission constraints are not modeled in the ICR calculation. All loads and resources are assumed to be connected to a single electric bus
- Internal transmission constraints are addressed through LSR and MCL
- LSR is calculated for the combined Load Zones of NEMA/Boston, SEMA and Rhode Island (Southeast New England (SENE) Capacity Zone)
- MCL is calculated for the combined Maine, New Hampshire and Vermont Load Zones (Northern New England (NNE)) Capacity Zone
- The Marginal Reliability Impact (MRI) method for calculating Demand Curves is used to determine System and Capacity Zone Demand Curves

- See the link for the May 26, 2016 PSPC Meeting presentation on Capacity Zone determinations at: http://www.iso-ne.com/static-assets/documents/2016/05/PSPC_FCA11_Zone_Formation.pdf.

Assumptions for the ICR Calculations

- *Load Forecast*
  - Load Forecast distribution
  - Net of Behind the Meter not Embedded (BTM) Photovoltaic (PV) resource forecast
- *Resource Data Based on Existing Qualified Capacity Resources for FC11*
  - The 27.262 MWs of retirement de-list bids for FCA11 have been deducted from the Existing resources
  - Generating Capacity Resources
  - Intermittent Power Capacity Resources (IPR)
  - Import Capacity Resources
  - Demand Resources (DR) – 12.36 MW of terminations removed
- *Resource Availability*
  - Generating Resources Availability
  - Intermittent Power Resources Availability
  - Demand Resources Availability
- *Load Relief from OP 4 Actions*
  - Tie Reliability Benefits
    - Quebec
    - Maritimes
    - New York
  - 5% Voltage Reduction

Load Forecast Data

- **Load forecast assumption from the 2016 CELT Report Load Forecast**

- **The load forecast weather related uncertainty is represented by specifying a series of multipliers on the peak load and the associated probabilities of each load level occurring**
  - derived from the 52 weekly peak load distributions described by the expected value (mean), the standard deviation and the skewness.

Modeling of PV in ICR Calculations (MW)

Month	2020-2021
Jun	672
Jul	676
Aug	680
Sep	684
Oct	0
Nov	0
Dec	0
Jan	0
Feb	0
Mar	0
Apr	0
May	709

- Table shows the monthly estimated Peak Load Reduction. These are the value of BTM PV resources modeled in ICR calculations (includes 8% Transmission & Distribution Gross-up)
- Developed using 36%* of PV nameplate forecast from the Distributed Generation Forecast Working Group (DGFWG) for 2020-2021
- Modeled as a load modifier in GE MARS by Regional System Plan (RSP) 13-subarea representation for hours ending 14:00 – 18:00

*Future net load scenarios are based on coincident, historical hourly load and PV production data for the years 2012-2015. For more info, see http://www.iso-ne.com/static-assets/documents/2016/03/2016_draftpvforecast_20160224revised.pdf. Final PV forecast documentation available at: http://www.iso-ne.com/static-assets/documents/2016/05/2016_pvforecast.pdf.

Load Forecast Data – New England System Load Forecast

Monthly Peak Load (MW) – 50/50 Forecast

Year	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
2020-2021	25,730	29,601	29,601	24,051	18,904	20,592	23,633	23,633	22,846	22,038	18,454	20,463

- Corresponds to the reference forecast labeled "1.2 REFERENCE - With reduction for BTM PV" from section 1.1 of the 2016 CELT Report

There is a distribution associated with each monthly peak. The distribution associated with the Seasonal Peak Load Forecast is show below:

Probability Distribution of Seasonal Peak Load (MW)

	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	95/5
Summer 2020	28,120	28,385	28,744	29,149	29,601	30,080	30,571	31,273	32,081	32,788
Winter 2020-2021	23,199	23,320	23,417	23,480	23,633	23,787	23,959	24,063	24,321	24,696

- From Section 1.6 - Seasonal Peak Load Forecast Distributions (Forecast is Reference with reduction for BTM PV) of the 2016 CELT

Resource Data – Generating Capacity Resources (MW)

Load Zone	Non-Intermittent Generation		Intermittent Generation		Total	
	Summer	Winter	Summer	Winter	Summer	Winter
MAINE	2,949.645	3,134.407	217.875	338.053	3,167.520	3,472.460
NEW HAMPSHIRE	4,075.922	4,240.694	162.576	229.151	4,238.498	4,469.845
VERMONT	218.351	258.055	74.693	124.751	293.044	382.806
CONNECTICUT	9,655.575	10,133.915	166.590	180.804	9,822.165	10,314.719
RHODE ISLAND	2,360.257	2,563.851	9.261	18.088	2,369.518	2,581.939
SOUTH EAST MASSACHUSETTS	4,357.821	4,756.516	95.076	78.189	4,452.897	4,834.705
WEST CENTRAL MASSACHUSETTS	3,739.406	4,010.360	103.052	120.676	3,842.458	4,131.036
NORTH EAST MASSACHUSETTS & BOSTON	3,211.668	3,632.243	77.056	72.834	3,288.724	3,705.077
Total New England	**30,568.645**	**32,730.041**	**906.179**	**1,162.546**	**31,474.824**	**33,892.587**

- Existing Qualified generating capacity resources for FCA11. The 16.030 MWs of Generator Retirement De-List bids for FCA11 have been deducted
- Intermittent resources have both summer and winter values modeled; non-Intermittent winter values provided for informational purpose
- Reflects a 30 MW derating to model the firm contract value of the Vermont Joint Owners (VJO) capacity import

Resource Data – Import Capacity Resources (MW)

Import Resource	Qualified Summer MW	External Interface
VJO - Highgate	6.000	Hydro-Quebec Highgate
NYPA - CMR	68.800	New York AC Ties
NYPA - VT	14.000	New York AC Ties
Total MW	88.800	

- Existing Qualified Import capacity resources for FCA11
- A 30 MW derating is applied to Citizens Block Load (modeled as a generator) to reflect the value of the VJO contract
- All are system-backed imports modeled with 100% resource availability

Resource Data – Export Delist (MW)

Export	Summer MW
Long Island Power Authority (LIPA) via Cross Sound Cable (CSC)	100.00

- Based on the value of the Delist Bid which reflects the export contract to LIPA
- Modeled as removed capacity from the resource supplying the export

Resource Data – Demand Resources (MW)

Load Zone	On-Peak		Seasonal Peak		RT Demand Response		RT Emergency Gen		Total	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
MAINE	136.992	132.642	-	-	136.536	154.432	6.402	4.550	279.930	291.624
NEW HAMPSHIRE	106.299	85.822	-	-	10.067	9.347	12.300	11.937	128.666	107.106
VERMONT	93.335	69.217	-	-	30.399	39.833	5.458	4.789	129.192	113.839
CONNECTICUT	75.583	54.942	440.158	416.045	59.426	58.721	59.097	58.151	634.264	587.859
RHODE ISLAND	207.499	187.966	-	-	35.944	38.712	15.720	11.329	259.163	238.007
SOUTH EAST MASSACHUSETTS	311.925	271.180	-	-	46.340	44.465	12.722	12.722	370.987	328.367
WEST CENTRAL MASSACHUSETTS	343.751	310.843	45.251	25.964	47.145	45.941	25.530	24.976	461.677	407.724
NORTH EAST MASSACHUSETTS & BOSTON	590.347	524.669	-	-	62.097	62.097	9.430	9.202	661.874	595.968
Total New England	1,865.731	1,637.281	485.409	442.009	427.954	453.548	146.659	137.656	2925.753	2670.494

- Existing Qualified Demand Resource capacity for FCA11. The 11.232 MWs of DR Retirement De-List bids and 12.36 MW of terminations for FCA11 have been removed
- Includes the Transmission and Distribution (T&D) Loss Adjustment (Gross-up) of 8%

Sub-area Resource and 50/50 Peak Load Forecast Assumptions Used in LRA and MCL Calculations (MW)

Resource Type	SENE	NNE	Total New England
Generator	9,929.746	7,243.918	30,468.645
Intermittent Generator	181.393	455.144	906.179
Import	-	6.000	88.800
On-Peak DR	1,109.771	336.626	1,865.731
Seasonal-Peak DR	-	-	485.409
Real-Time DR	144.381	177.002	427.954
Real-Time Emergency Gen DR	37.872	24.160	146.659
Total	11,403.163	8,242.850	34,389.377
	SENE	NNE	New England
50/50 Load Forecast Net BTM PV	12,153	5,882	29,601

- LRA is calculated for the SENE Capacity Zones; MCL is calculated for NNE
- Generating Resources values includes a 30 MW derating to reflect the value of the VJO contract and the 100 MW export de-list
- The 27.262 MWs of retirement de-list bids and 12.36 MWs of DR terminations for FCA11 have been removed from the Existing resources
- Generating resource assumptions are based on the RSP areas, used as a proxy for the Load Zones, as the transmission transfer capability analysis is performed using the RSP 13-bubbles. DR values are the Load Zone values. For the resources, the sum of the Load Zones and the corresponding RSP sub-areas for the Capacity Zones are the same
- The Capacity Zone 50/50 Peak Load Forecast values shown are the sum of the corresponding RSP areas and are shown for informational purposes

FCA #11 TSA Requirements Assumptions – Detailed Assumptions (Revised)

- Load Forecast Data
  - 2016 CELT Net forecast (adjusted for BTM-PV forecast)
    - SENE sub-area 90/10 peak load: 13,190 MW
- Resource Data for SENE
  - 2020-21 Existing Capacity Qualification data as of July 25, 2016
    - Generating capacity: 10,111* MW
      - Includes 8,950 MW of regular generation resources, 181 MW of intermittent generation resources and 980 MW of peaking generation resources
    - Passive Demand Resources: 1,110 MW
    - Non-RTEG Active Demand Resources: 151 MW
    - Real-Time Emergency Generation: 38 MW

Retirement De-list bids are now deducted from the Existing Capacity Qualification data
NOTE: All values have been rounded off to the nearest whole number

FCA #11 TSA Requirements Assumptions – Detailed Assumptions, cont.

- Resource Unavailability Assumptions
  - Regular Generation Resources - Weighted average EFORd
    - SENE sub-area: 11 %
  - Peaking Generation Resources - Operational de-rating factor: 20%
  - Passive Demand Resources: 0%
  - Non-RTEG Active Demand Resources - De-rating based on performance factors
    - Boston sub-area: 15%
    - SEMA sub-area: 20%
    - RI sub-area: 21%
  - Real-Time Emergency Generation - De-rating based on performance factors
    - Boston sub-area: 5%
    - SEMA sub-area: 13%
    - RI sub-area: 3%

NOTE: All values have been rounded off to the nearest whole number

LRA, TSA & MCL Internal Transmission Transfer Capability Assumptions (MW)

- Internal Transmission Transfer Capability
  - Southeast New England Import
    - N-1 Limit: 5,700
    - N-1-1 Limit: 4,600
  - Northern New England Export (North-South interface)
    - N-1 Limit: 2,725

Transmission transfer capability limits – presented at the Planning Advisory Committee (PAC) on March 22, 2016 (http://www.iso-ne.com/static-assets/documents/2016/03/a2_fca11_zonal_boundary_determinations.pdf)

Includes:

- The Greater Boston Upgrades - the certification of this project to be in service by June 2019 has been accepted by ISO New England
- Upgrades to Rhode Island facilities which are certified for CCP9 in response to the Brayton Point retirement
- Northern New England Scobie + 394 – the stability limit has been updated

Availability Assumptions - Generating Resources

- **Forced Outages Assumption**
  - Each generating unit's Equivalent Forced Outage Rate on Demand (non-weighted EFORd) modeled
  - Based on a 5-year average (Jan 2011 – Dec 2015) of generator submitted Generation Availability Data System (GADS) data
  - NERC GADS Class average data is used for immature units

- **Scheduled Outage Assumption**
  - Each generating unit weeks of Maintenance modeled
  - Based on a 5-year average (Jan 2011 – Dec 2015) of each generator's actual historical average of planned and maintenance outages scheduled at least 14 days in advance
  - NERC GADS Class average data is used for immature units

Availability Assumptions - Generating Resources (Revised)

Resource Category	Summer MW	Assumed Average EFORd (%) Weighted by Summer Ratings	Assumed Average Maintenance Weeks Weighted by Summer Ratings
Combined Cycle	14,399	3.8	5.1
Fossil	6,088	17.5	5.9
Nuclear	3,344	2.1	4.5
Hydro (Includes Pumped Storage)	2,878	3.3	4.7
Combustion Turbine	3,510	10.5	2.6
Diesel	191	6.5	1.0
Miscellaneous	58	17.6	3.0
Total System	30,469	7.1	4.8

- Assumed summer MW weighted EFORd and Maintenance Weeks are shown by resource category for informational purposes. In the LOLE simulations, individual unit values are modeled

Changes in Generator Availability

- ISO-NE uses a 5-year rolling calculation of GADS EFORd for each generator
  - This year's ICR calculation is using the EFORd from PowerGads software for each generator based on outages reported from the years 2011 – 2015.
- The New England total of 5-year individual EFORd for each generator weighted by its qualified capacity for FCA11 is 7.1%
  - The FCA10 New England average was 6.9%
- Some of this 0.2% increase can be attributed to the retirement of the Pilgrim nuclear generator
  - Large unit with relative low EFORd
- While 2015 annual EFORd is improved compared to recent years, it is replacing 2010 in the 5-year average which is a year that also had good availability (System EFORd of 3.85% for 2010 versus 4.07 % for 2015)
- If generator availability trends continue to improve, we will slowly see a decrease in EFORd as the years with lower availability drop out of the 5-year average, particularly 2012 and 2013

Availability Assumptions - Intermittent Power Resources

- Intermittent Power Resources are modeled as 100% available since their outages have been incorporated in their 5-year historical output used in their ratings determination.

Demand Resource Availability

Load Zone	On-Peak		Seasonal Peak		RT Demand Response		RT Emergency Gen		Total	
	Summer (MW)	Perform-ance (%)	Summer (MW)	Perform-ance (%)	Summer (MW)	Perform-ance (%)	Summer (MW)	Perform-ance (%)	Summer	Perform-ance (%)
MAINE	136.992	100	-	-	136.536	99	6.402	91	279.930	99
NEW HAMPSHIRE	106.299	100	-	-	10.067	83	12.300	95	128.666	98
VERMONT	93.335	100	-	-	30.399	97	5.458	86	129.192	99
CONNECTICUT	75.583	100	440.158	100	59.426	91	59.097	94	634.264	99
RHODE ISLAND	207.499	100	-	-	35.944	79	15.720	97	259.163	97
SOUTH EAST MASSACHUSETTS	311.925	100	-	-	46.340	80	12.722	87	370.987	97
WEST CENTRAL MASSACHUSETTS	343.751	100	45.251	100	47.145	83	25.530	96	461.677	98
NORTH EAST MASSACHUSETTS & BOSTON	590.347	100	-	-	62.097	85	9.430	95	661.874	99
Total New England	1,865.731	100	485.409	100	427.954	90	146.659	94	2,925.753	98

- Uses historical DR performance from summer & winter 2011 – 2015. For more information see the May 26, 2016 PSPC presentation at: http://www.iso-ne.com/static-assets/documents/2016/05/PSPC_05262016_ICR_Demand_Resource_Assumption_A5_1.pdf
- Modeled by zones and type of DR with outage factor calculated as 1- performance/100
- Resource values reflects 12.36 MW of DR terminations

OP4 Assumptions
- Action 6 & 8 - 5% Voltage Reduction (MW)

	90-10 Peak Load	Passive DR	RTDR	RTEG	Action 6 & 8 5% Voltage Reduction
Jun 2020- Sep 2021	32,081	2,351	428	147	437
Oct 2020 - May 2021	24,321	2,079	454	138	325

- Uses the 90-10 Peak Load Forecast minus BTMNEL PV and all Passive & Active DR; reflects 12 MW of DR terminations
- Multiplied by the 1.5% value used by ISO Operations in estimating relief obtained from OP4 voltage reduction
- Average of the past 6 years of test results for spring voltage reduction is 1.57%; Average of the past 6 years (2 fall tests were canceled) of fall test results is 1.88%

OP 4 Assumptions
- Tie Benefits (MW)

- Based on the results of the 2020-2021 Tie Benefits Study

Control Area	2020/21 FCA11
Québec via Phase II	959
Québec via Highgate	145
Maritimes	500
New York	346
Total Tie Benefits	1,950

- Modeled in the ICR calculations with the tie line availability assumptions shown below

External Tie	Forced Outage Rate (%)	Maintenance (Weeks)
HQ Phase II	0.39	2.7
Highgate	0.07	1.3
New Brunswick Ties	0.08	0.4
New York AC Ties	0	0
Cross Sound Cable	0.89	1.5

OP 4 Assumptions
- Minimum Operating Reserve Requirement (MW)

- Minimum Operating Reserve is the 10-Minute minimum Operating Reserve requirement for ISO Operations

- Modeled at 200 MW in the ICR calculation

Summary of all MW Modeled in the ICR Calculations (MW)

Type of Resource/OP4	2020-2021 FCA
Generating Resources	30,598.645
Intermittent Power Resources	906.179
Demand Resources	2,925.753
Import Resources	88.800
Export Delist	(100.000)
Import Deratings	(30.000)
OP 4 Voltage Reduction	437.000
Minimum Operating Reserve	(200.000)
Tie Benefits (includes 959 MW HQICCs)	1,950.000
Proxy Units	-
Total MW Modeled in ICR	**36,576.377**

Notes:

- Intermittent Power Resources have both the summer and winter capacity values modeled
- Reflects 27.262 MW of retirement de-lists and 12.36 MW of DR terminations
- Import deratings reflect the value of the firm VJO contract and is removed from the generating resources MWs
- OP 4 Voltage Reduction includes both Action 6 and Action 8 MW assumptions.
- Minimum Operating Reserve is the 10-Minute minimum Operating Reserve requirement for ISO Operations

Questions