# 166 FERC ¶ 61,007

## UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman; Cheryl A. LaFleur and Richard Glick.

ISO New England Inc. New England Power Pool Docket No. ER19-291-000

## ORDER ACCEPTING INFORMATIONAL FILING

(Issued January 4, 2019)

1. On November 6, 2018, as corrected on December 20, 2018, pursuant to section 205 of the Federal Power Act (FPA),<sup>1</sup> ISO New England Inc. (ISO-NE) and New England Power Pool (NEPOOL) (together, Filing Parties) jointly filed proposed values for the Installed Capacity Requirement (ICR), Hydro Québec Interconnection Capability Credits, and related values (collectively, ICR-Related Values) for the thirteenth Forward Capacity Auction (FCA 13).<sup>2</sup> As discussed below, we accept the proposed ICR-Related Values, to become effective January 5, 2019, as requested.

#### I. <u>Background</u>

2. Through the FCA, ISO-NE procures the capacity that it needs to ensure resource adequacy within its footprint. ISO-NE holds FCAs annually, three years in advance of the relevant delivery year (Capacity Commitment Period). Resources compete in the auctions to obtain a commitment to supply capacity (Capacity Supply Obligation) in exchange for a market-priced capacity payment. The Forward Capacity Market rules<sup>3</sup> require ISO-NE to submit to the Commission an informational filing containing the ICR-Related Values, no later than 90 days prior to each FCA.

<sup>&</sup>lt;sup>1</sup> 16 U.S.C. § 824d (2012).

 $<sup>^{2}</sup>$  FCA 13 is scheduled to begin on February 4, 2019.

<sup>&</sup>lt;sup>3</sup> ISO-NE Tariff, III.12 Calculation of Capacity Requirements, § III.12.3 (20.0.0).

3. On November 19, 2018, after the instant filing was made, the Commission accepted a filing from ISO-NE to terminate a Capacity Supply Obligation held by Clear River Energy LLC for its resource known as Clear River Unit 1 (Clear River) for the 2021–2022 Capacity Commitment Period.<sup>4</sup>

4. On December 3, 2018, the Commission accepted a compliance filing from ISO-NE to implement an interim Fuel Security Study process for FCA 13, 14, and 15,<sup>5</sup> which will apply a uniform set of modeling scenarios to establish whether a resource submitting a Retirement De-List Bid is needed to maintain ISO-NE's fuel security. The Commission also accepted ISO-NE's proposal to treat resources retained for fuel security purposes as price-takers by requiring them to submit offers into the FCA at a zero price.<sup>6</sup>

## II. Summary of the ICR Filing

5. Filing Parties propose two sets of ICR-Related Values. One set assumes that the Commission will accept the termination of Clear River's Capacity Supply Obligation for the 2021–2022 Capacity Commitment Period and, therefore, does not include Clear River in the model used to calculate the ICR-Related Values. The other set assumes that the Commission will reject the termination of Clear River's Capacity Supply Obligation and, therefore, includes Clear River in the model.<sup>7</sup>

6. Because the Commission has accepted the termination of Clear River's Capacity Supply Obligation, which has made the proposed ICR-Related Values with Clear River irrelevant, the summary below only provides the proposed ICR-Related Values that do not take Clear River into account.

<sup>5</sup> Corresponding to the 2022–2023, 2023–2024, and 2024–2025 Capacity Commitment Periods.

 $^{6}$  ISO New England Inc., 165 FERC  $\P$  61,202 (2018) (Fuel Security Compliance Order).

<sup>7</sup> Filing Parties November 6 Transmittal at 2.

<sup>&</sup>lt;sup>4</sup> ISO New England Inc., 165 FERC  $\P$  61,137 (2018) (accepting filing and denying waiver request).

## A. Installed Capacity Requirement

7. For FCA 13, Filing Parties propose an ICR of 34,719 MW for the 2022–2023 Capacity Commitment Period.<sup>8</sup> Filing Parties state that, consistent with prior years, the ICR is based on four essential assumptions: (1) the load forecast; (2) resource capacity ratings; (3) resource availability; (4) and relief assumed obtainable by operator actions during capacity deficiencies, including emergency assistance obtainable from New England's interconnections with neighboring control areas (i.e., tie benefits), voltage reductions, and maintaining a minimum level of system operating reserves.<sup>9</sup> Each of these assumptions is summarized below.

## 1. Load Forecast

8. Filing Parties state that the forecasted peak loads of the entire New England Control Area for the 2022–2023 Capacity Commitment Period are a major input into the calculation of the ICR-Related Values. Filing Parties explain that ISO-NE developed the load forecast using the same methodology used in previous years, which reflects economic and demographic assumptions reviewed in the NEPOOL stakeholder process.<sup>10</sup>

9. Filing Parties state that the projected New England Control Area summer 50/50 peak load<sup>11</sup> for the 2022–2023 Capacity Commitment Period is 29,093 MW. Filing Parties explain that, as with FCA 12, all probabilistic ICR-Related Values calculations for FCA 13 incorporate an hourly profile of behind-the-meter photovoltaic generation (BTM PV). Filing Parties state that, this year, BTM PV was modeled using an uncertainty methodology (1) in order to be consistent with the use of uncertainty multipliers in

<sup>9</sup> *Id.* at 9.

<sup>10</sup> *Id.* at 10.

<sup>&</sup>lt;sup>8</sup> Filing Parties also propose a net ICR of 33,750 MW, which reflects the amount of capacity that must be procured in the Forward Capacity Market after accounting for capacity imports across the Hydro-Québec Phase I/II HVDC Transmission Facilities, which is discussed further below. *See infra* P 19. Net ICR is an input into developing the Marginal Reliability Impact Demand Curves, which are used to procure capacity in the FCA. Filing Parties November 6 Transmittal at 9 n.26.

<sup>&</sup>lt;sup>11</sup> The 50/50 peak load figure implies that this value has a 50 percent chance of being exceeded.

probabilistically modelling the load forecast and (2) because it recognizes that, while high BTM PV outputs are consistently associated with New England peak load conditions, a certain level of variability exists.<sup>12</sup>

# 2. <u>Resource Capacity Ratings</u>

10. Filing Parties state that the assumed resource capacity ratings are based on the latest available ratings of Existing Capacity Resources<sup>13</sup> that have qualified for FCA 13 at the time of the ICR calculation. Filing Parties note that resource additions and most attritions are not assumed in the ICR calculation because there is no certainty which resource additions or attritions will clear the FCA. Filing Parties explain that, depending on simulation outcomes, ISO-NE may use proxy units and/or increase load assumptions to arrive at a single capacity value that satisfies the 0.1 days of loss of load per year reliability criterion (i.e., the ICR).<sup>14</sup>

# 3. <u>Resource Availability</u>

11. Filing Parties state that the generating resource availability assumptions used in the ICR calculations are based on historical scheduled maintenance and forced outages of these capacity resources, which are based on each unit's historical five-year average. Filing Parties explain that, if data are unavailable for a given resource, ISO-NE uses the class average maintenance and forced outage data for the same class of unit to substitute for the missing annual data.<sup>15</sup>

12. Filing Parties also explain that the Qualified Capacity of an Intermittent Power Resource is the resource's median output during the Reliability Hours, averaged over a five-year period. Filing Parties state that these resources are assumed to be 100 percent available because their availability is reflected in the reliability ratings. Filing Parties

<sup>14</sup> Filing Parties November 6 Transmittal at 11; *see also id.*, Attachment 2 (Sedlacek-Scibelli Test.) at 11–12.

<sup>15</sup> *Id.* at 12.

<sup>&</sup>lt;sup>12</sup> Filing Parties November 6 Transmittal at 10–11.

<sup>&</sup>lt;sup>13</sup> ISO-NE Tariff, I.2 Rules of Construction; Definitions (114.0.0), § I.2.2 (defining Existing Capacity Resource as "any resource that does not meet any of the eligibility criteria to participate in the Forward Capacity Auction as a New Capacity Resource").

add that the availability assumptions for passive Demand Resources are modeled as 100 percent available, while availability assumptions for active Demand Resources are based on actual responses over the summer and winter of 2013 through 2017.<sup>16</sup>

# 4. Load Relief

# a. <u>Tie Benefits</u>

13. Filing Parties state that the methodology for calculating the ICR requires ISO-NE to determine a tie benefits assumption, which reflects the assumed amount of emergency assistance from neighboring Control Areas that New England could rely on, without jeopardizing reliability, in the event of a capacity shortage. Filing Parties note that the tie benefits assumption reduces the ICR and thus lowers the amount of capacity to be procured in the FCA.<sup>17</sup>

14. Filing Parties state that the proposed ICR for FCA 13 reflects total tie benefits of 2,000 MW realized from interconnections to the New Brunswick, New York, and Québec Control Areas, as calculated in the tie benefits study for the 2022–2023 Capacity Commitment Period. Filing Parties explain that the methodology that ISO-NE uses is consistent with the ISO-NE Transmission, Markets, and Services Tariff (Tariff)<sup>18</sup> and requires a probabilistic multi-area reliability model.<sup>19</sup>

15. Filing Parties state that, in the first half of 2018, ISO-NE reviewed the transfer limits of New England's external interconnections based on the latest available information regarding forecasted topology and load forecast information. Based on this analysis, ISO-NE determined that no changes to the established external interface limits were warranted.<sup>20</sup> Filing Parties also state that ISO-NE reviewed the New England

<sup>16</sup> Id.

<sup>17</sup> *Id.* at 12–13.

<sup>18</sup> ISO-NE Tariff, III.12 Calculation of Capacity Requirements, § III.12.9 (20.0.0).

<sup>19</sup> Filing Parties November 6 Transmittal at 13.

<sup>20</sup> Filing Parties state that ISO-NE established transfer capability values for the listed interconnections as follows: 700 MW for the New Brunswick interconnections; 1,400 MW for the New York-New England AC interconnections as a group because the transfer capability of these interconnections is interdependent on the transfer capability of the other interconnections in this group; 1,400 MW for the Hydro-Québec Phase I/II HVDC Transmission Facilities; and 200 MW for the Highgate interconnection. Filing

Control Area's internal transmission interfaces, using the transfer capability values from its most recent transfer capability analyses.<sup>21</sup>

# b. <u>System Reserves</u>

16. Filing Parties state that the Tariff requires ISO-NE to assume an amount of system reserves to calculate the ICR-Related Values, which is consistent with the amount of reserves needed for reliable system operations during emergency conditions. Filing Parties explain that this assumption ensures that, during peak load conditions, under extremely tight capacity situations (i.e., while emergency capacity and energy operating plans are being used), ISO-NE operations would have available the amount of operating reserves for transmission system protection, system load balancing, and tie control needed prior to invoking manual load shedding. Filing Parties note that, since 1980, ISO-NE has assumed the same amount of system reserves, 200 MW, to calculate the ICR-Related Values.<sup>22</sup>

17. Filing Parties state that this assumption was discussed with stakeholders during the last several years, including in 2010 and in 2017. Filing Parties state that, this year, ISO-NE reviewed this assumption due to (1) changes in peak load, (2) an increase in the size of credible contingencies on the New England Transmission System, (3) New England's limited tie capability to the Eastern Interconnection, and (4) changes in the resource mix. Filing Parties state that, based on the review, ISO-NE determined that it needed to increase this assumption to 700 MW.<sup>23</sup>

# B. Local Sourcing Requirement and Maximum Capacity Limit

18. Filing Parties propose a Local Sourcing Requirement for the Southeast New England Capacity Zone of 10,141 MW, which represents the minimum amount of capacity that must be electrically located within that zone because it is import-constrained. Filing Parties also propose a Maximum Capacity Limit for the Northern

<sup>22</sup> *Id.* at 14.

Parties note that ISO-NE determined that there was no available transfer capability over the Cross Sound Cable for tie benefits. Filing Parties November 6 Transmittal at 14.

<sup>&</sup>lt;sup>21</sup> *Id.* at 13–14.

<sup>&</sup>lt;sup>23</sup> Id. at 14–15 (citing Attachment 3 (Brandien Test.)).

New England Capacity Zone of 8,545 MW, which reflects the maximum amount of capacity that can be procured from within that zone because it is export-constrained.<sup>24</sup>

# C. <u>Hydro Québec Interconnection Capability Credits</u>

19. Filing Parties propose Hydro Québec Interconnection Capability Credits of 969 MW. Filing Parties state that these capacity credits reflect the fact that certain entities pay for and, consequently, hold certain rights over the Hydro Québec Phase I/II HVDC Transmission Facilities. They explain that ISO-NE allocates Hydro Québec Interconnection Capability Credits in a manner proportional to the rights that each entity holds.<sup>25</sup>

# D. Marginal Reliability Impact Demand Curves

20. Filing Parties state that, beginning with FCA 11 (i.e., the 2020–2021 Capacity Commitment Period), ISO-NE began using the Marginal Reliability Impact Demand Curve methodology to develop system-wide and zonal capacity demand curves used in the FCA to procure needed capacity. Filing Parties note that the system-wide demand curve uses the same modeling assumptions and methodology used to determine the ICR. They state that, similarly, the import-constrained zonal capacity demand curve for Southeast New England uses the same modeling assumptions and methodology used to determine its Local Sourcing Requirement, and the export-constrained zonal capacity demand curve for Northern New England uses the same modeling assumptions and methodology used to determine its Maximum Capacity Limit.<sup>26</sup>

# E. <u>Requested Effective Date</u>

21. Filing Parties request an effective date of January 5, 2019, which is 60 days from the date of filing, so the proposed ICR-Related Values can be used in FCA 13, which ISO-NE will hold on February 4, 2019.<sup>27</sup>

# III. Notice of Filing and Responsive Pleadings

22. Notice of the ICR Filing was published in the *Federal Register*, 83 Fed. Reg. 56,314 (2018), with protests and interventions due on or before November 27, 2018.

<sup>24</sup> *Id.* at 3.

<sup>25</sup> *Id.* at 17.

<sup>26</sup> *Id.* at 16–20.

<sup>27</sup> *Id.* at 21 & n.8.

Dominion Energy Services, Inc.; Energy New England, LLC; Exelon Corp.; FirstLight Power Resources, Inc. (FirstLight); LS Power Associates, L.P.; Massachusetts Electric Company, Nantucket Electric Company, and Narragansett Electric Company; New England Power Generators Association, Inc. (NEPGA); New England States Committee on Electricity (NESCOE); and NRG Power Marketing LLC filed timely motions to intervene.

23. On November 16, 2018, NEPOOL filed supplemental comments. On November 27, 2018, FirstLight, NEPGA and NESCOE filed protests. On December 12, 2018, ISO-NE filed an answer to the protests, and NEPGA filed a supplemental protest. On December 20, 2018, NEPGA filed an answer to ISO-NE's answer.

# IV. <u>Discussion</u>

# A. <u>Procedural Matters</u>

24. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding.

25. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We accept ISO-NE's and NEPGA's answers because they have provided information that assisted us in our decision-making process.

# B. <u>Substantive Matters</u>

26. We accept the proposed ICR-Related Values, to become effective January 5, 2019.<sup>28</sup> The contested issues in this proceeding pertain to the assumptions that impact the ICR and the system-wide demand curve, and we find as follows: First, we find that Filing Parties have shown that the underlying system reserves assumption used to calculate the ICR-Related Values is just and reasonable. Second, we find that Filing Parties have sufficiently supported the use of different tie benefits and outages assumptions to calculate the ICR-Related Values than those used in the Fuel Security

<sup>&</sup>lt;sup>28</sup> As noted above, these are the proposed ICR-Related Values that do not take Clear River into account. *See supra* P 6.

Study. As for the remaining uncontested ICR-Related Values,<sup>29</sup> we find them just and reasonable and summarily accept them without further discussion.

## 1. <u>System Reserves Assumption</u>

### a. <u>Pleadings</u>

27. NESCOE argues that Filing Parties have not provided sufficient information to demonstrate that their filing is just and reasonable.<sup>30</sup> NESCOE contends that, while Filing Parties cite limited tie capability with neighboring systems, among other things, to support increasing the reserves assumption from 200 MW to 700 MW, their filing only qualitatively describes this factor and never provides analysis to support an increase of this magnitude.<sup>31</sup>

28. NESCOE claims that the closest that Filing Parties come to providing this analysis is in the Sedlacek-Scibelli Testimony, which notes that the net change in ICR from FCA 12 to FCA 13 is only 25 MW.<sup>32</sup> NESCOE asserts that ISO-NE is trying to achieve a set ICR value, rather than determine the amount needed to meet resource adequacy requirements.<sup>33</sup> NESCOE notes that ISO-NE recently implemented a change to its load forecasting methodology,<sup>34</sup> which reduced the ICR and, in turn, costs to consumers. NESCOE claims that this proposal counteracts that change by adding to consumer costs without sufficient rationale.<sup>35</sup>

<sup>30</sup> NESCOE Protest at 2.

<sup>31</sup> *Id*.

<sup>32</sup> *Id.* at 3 (quoting Sedlacek-Scibelli Test. at 35).

<sup>33</sup> *Id.* at 4.

<sup>34</sup> These changes pertain to the contributions of BTM PV generation to the load forecast discussed above. *See supra* P 8.

<sup>35</sup> NESCOE Protest at 3–4.

<sup>&</sup>lt;sup>29</sup> Uncontested ICR-Related Values include the (1) Local Sourcing Requirement for the Southeast New England Capacity Zone; (2) Maximum Capacity Limit for the Northern New England Capacity Zone; and (3) Hydro Québec Interconnection Capability Credits.

29. NESCOE argues that, based on data from the past five years, the Commission should consider Filing Parties' proposed change to the system reserves assumption in the context of ISO-NE's tendency to overestimate ICR in the primary FCA as compared to the annual reconfiguration auctions.<sup>36</sup> NESCOE contends that, if the ICR calculation was working correctly, the initial ICR would be slightly higher in some years and slightly lower in others. NESCOE also asserts that historical evidence shows that the rest of the assumptions in the ICR calculation lead to over-procurement by more than enough to cover the 550 MW by which ISO-NE proposes to increase ICR as a result of the change to the system reserves assumption.<sup>37</sup>

30. In its answer, ISO-NE responds that it sufficiently justified its proposal to change the system reserves assumption, pointing to the reasons first provided in its transmittal and the testimony of Peter Brandien, ISO-NE's Vice President of System Operations.<sup>38</sup> ISO-NE rebuts NESCOE's assertion that quantitative analysis is required to support its proposal, noting that the Commission has previously found that quantitative analysis is not required to support a rate change when other factors (such as economic theory of external considerations) justify the change.<sup>39</sup> ISO-NE concedes that the Phase II Interconnection with Hydro Québec generally operates at less than its technical rating of 2,000 MW but asserts that the facility tends to operate at values at or near 1,800 MW during the system peak, which supports ISO-NE's argument that the single largest credible contingency today is considerably larger than in 1980.<sup>40</sup> ISO-NE contends that the proposed 700 MW reserves assumption strikes a balance between the previous system reserves assumption of 200 MW and the amount of reserves that ISO-NE needs now, as a result of changed system conditions, before it may have to start shedding load to maintain system reliability in emergency conditions.<sup>41</sup>

31. With respect to the allegations of ICR calculation bias, ISO-NE argues that NESCOE fails to acknowledge that ISO-NE investigated this issue and shared the results of its analysis with stakeholders. ISO-NE states that it attributed any overestimation

<sup>36</sup> *Id.* at 4–6.

<sup>37</sup> *Id.* at 6.

<sup>38</sup> ISO-NE Answer at 4–5.

<sup>39</sup> *Id.* at 5 & n.14 (citing *ISO New England Inc.*, 158 FERC ¶ 61,138, at P 43 (2017)).

<sup>40</sup> *Id.* at 6–7.

<sup>41</sup> *Id.* at 9.

over the period in question to a change in the load forecasting methodology that ISO-NE implemented in 2015 to account for BTM PV resources as a reduction to the load forecast. ISO-NE states that, when it implemented this new methodology in 2015 for the 2019–2020 Capacity Commitment Period, it also implemented it for all the annual reconfiguration auctions that occurred that year, including for the 2016–2017, 2017–2018, and 2018–2019 Capacity Commitment periods, notwithstanding the fact that the BTM PV methodology had not been used in the associated primary FCAs.<sup>42</sup>

## b. <u>Commission Determination</u>

32. We disagree with NESCOE's arguments that ISO-NE has not justified the need for increasing the system reserves assumption from 200 MW to 700 MW. The Tariff requires ISO-NE to select a reserves assumption that is "consistent with [the amount of system reserves] needed for reliable system operations during Emergency Conditions."<sup>43</sup> The precise reserves assumption is a matter of engineering judgment. We find that Filing Parties have demonstrated that the increase of this assumption is just and reasonable.

33. As Filing Parties explain, ISO-NE has determined the need to increase the system reserves assumption from 200 MW to 700 MW based on four contributing factors: (1) changes in the peak load; (2) an increase in the size of credible contingencies on the New England Transmission System; (3) changes in the resource mix; and (4) New England's limited tie capability to the Eastern Interconnection.<sup>44</sup> ISO-NE's Vice President of System Operations, Peter Brandien, elaborates on each of these factors.<sup>45</sup>

34. With respect to system peak load, Mr. Brandien explains that, in 1980, when the system reserves assumption was last revised, the system peak load was approximately 15,000 MW in contrast to system peak loads that can reach as high as 28,000 MW today.<sup>46</sup> As for contingencies, Mr. Brandien draws a similar contrast regarding single contingencies. Mr. Brandien notes that, although, in 1980, the single largest contingencies were two nuclear units ranging between 800–900 MW each, today New England can experience a single credible contingency of up to 2,000 MW associated

<sup>42</sup> *Id.* at 10–11.

<sup>43</sup> ISO-NE Tariff, III.12 Calculation of Capacity Requirements, § III.12.7.4 (20.0.0).

<sup>44</sup> Filing Parties November 6 Transmittal at 14.

<sup>45</sup> Id., Attachment 3 (Brandien Test.).

<sup>46</sup> Brandien Test. at 4.

with the Phase II Interconnection with Hydro Québec and three other large credible contingencies ranging between 1,250–1,650 MW each.<sup>47</sup> Mr. Brandien explains that, if these larger contingencies occur with a system reserves assumption of 200 MW, ISO-NE would need to shed significant amounts of load to meet reliability standards.<sup>48</sup>

35. As for the resource mix, Mr. Brandien also explains that, since 1980, the resource mix has changed due to retirements of conventional resources such as coal- and oil-fired generators and increased penetrations of variable resources (such as wind and solar). Mr. Brandien states that variable resources do not have the same operational characteristics as conventional resources. For example, Mr. Brandien notes that, although wind and solar resources can provide downward ramping capability for when the region approaches peak demand, they generally do not provide similar upward ramping capability.<sup>49</sup> Mr. Brandien explains that, as a result, it can be important to have additional operating reserves to provide upward ramping capability to manage the system during stressed conditions.<sup>50</sup>

36. Against this backdrop, Mr. Brandien explains that New England's tie capability to the Eastern Interconnection has not changed appreciably in the last 38 years, which is important because New England tends to be a heavy importer of power due to higher energy prices in New England. Mr. Brandien also notes that New England's location in the Eastern Interconnection means that the majority of a source loss in New England would be initially supplied by resources to the west of New England, namely via the heavily-loaded interfaces with New York.<sup>51</sup> We find that ISO-NE has met its burden to show that the proposed increase in the system reserves assumption from 200 MW to 700 MW is just and reasonable.

37. We disagree with NESCOE's argument that the increased reserves assumption should be rejected because it exacerbates an alleged bias in ISO-NE's ICR calculations. Specifically, NESCOE requests that the Commission consider the proposed system reserves assumption change "within the context" of data showing that ICRs for several Capacity Commitment Periods were reduced between each period's FCA and third

<sup>47</sup> Id.

<sup>48</sup> *Id.* at 5.

49 *Id.* at 7.

<sup>50</sup> *Id.* at 7–8.

<sup>51</sup> *Id.* at 6.

annual reconfiguration auction.<sup>52</sup> As an initial matter, we are not persuaded that the cited reductions in ICRs weigh on the justness and reasonableness of the specific system reserves assumption change that ISO-NE proposes in this filing.

38. In addition, we agree with ISO-NE that several of the ICR reductions that NESCOE presents appear attributable to a change in the load forecast methodology, not a bias on the part of ISO-NE.<sup>53</sup> As ISO-NE explains in its answer, it implemented the new load forecast methodology in 2015 and has used it in setting ICRs for all FCAs and annual reconfiguration auctions since that time. As a result, ISO-NE conducted the FCAs for Capacity Commitment Periods 2016-2017, 2017-2018, and 2018-2019 using the previous load forecast methodology, and it conducted one or more annual reconfiguration auctions for those periods using the new load forecast methodology. Based on ISO-NE's data, we find that much or all of the reduction in ICRs for those Capacity Commitment Periods was due to this change in load forecast methodology.<sup>54</sup>

# 2. <u>Tie Benefits and Outages Assumptions</u>

## a. <u>Pleadings</u>

39. NEPOOL states that, during the stakeholder process, some market participants opposed the ICR-Related Values because those participants felt that the values failed to recognize the reliability contribution of Cross-Sound Cable tie benefits. NEPOOL states that other market participants were opposed because they had concerns about the different treatment of tie benefits versus capacity resources with performance obligations.<sup>55</sup>

40. FirstLight and NEPGA note that the ICR-Related Values used in ISO-NE's ICR study are based on lower levels of outage rates, yielding a much higher level of generating unit availability (and load support) when compared to the outage rates used in the Fuel Security Study.<sup>56</sup> NEPGA contends that ISO-NE's use of relatively lower tie

<sup>52</sup> NESCOE Protest at 6.

<sup>53</sup> ISO-NE Answer at 9-11; *see also* ISO-NE Power Supply Planning Committee, *Report to the NEPOOL Reliability Committee* (July 11, 2018), https://iso-ne.com/static-assets/documents/2018/07/a5\_pspc\_referral\_on\_icr\_calculation\_bias.docx.

<sup>54</sup> ISO-NE Answer at 9–11.

<sup>55</sup> NEPOOL Supplemental Comments at 4–5.

<sup>56</sup> FirstLight Protest at 6; NEPGA Protest at 9–15.

benefit assumptions in the Fuel Security Study, as compared to the ICR study, leads to a lower system-wide capacity requirement than if the two studies used the same tie benefit assumptions.<sup>57</sup>

41. FirstLight and NEPGA argue that, if the Commission were to accept, in Docket No. ER18-2364-000, ISO-NE's interim fuel security tariff provisions in which resources retained for fuel security will be entered into the FCA as price-takers,<sup>58</sup> then the Commission should require ISO-NE to calculate the ICR-Related Values for FCA 13 using the same imported energy (and thus, tie benefits) and outage rate assumptions. FirstLight and NEPGA contend that using the same assumptions would ensure that the region-wide capacity requirement is calculated consistently with the resource performance upon which the region-wide fuel security reliability standard is based.<sup>59</sup> FirstLight and NEPGA also assert that it would be appropriate for the Commission to require ISO-NE to increase all points on the system-wide demand curve for FCA 13 by 1,400 MW, which corresponds to the quantity of qualified capacity for Mystic 8 and 9 that ISO-NE will offer as price-takers<sup>60</sup> in FCA 13.<sup>61</sup> NEPGA claims that shifting the system-wide demand curve would not result in over-procurement of capacity in FCA 13,<sup>62</sup> rather it would allow the FCA to continue to clear capacity at a quantity and price that reflects its marginal reliability impact, while "[permitting] the fuel security requirement to be plausibly considered as a constraint within the [Forward Capacity Market]."63

42. In its answer, ISO-NE characterizes the relief requested by FirstLight and NEPGA as an impermissible attempt to circumvent the FPA section 206 process to change ISO-NE's Tariff.<sup>64</sup> NEPGA responds that, while the Commission could exercise its authority under FPA section 206, it properly raised its protest in this FPA section 205 proceeding

<sup>57</sup> NEPGA Protest at 8–9.

<sup>58</sup> Fuel Security Compliance Order, 165 FERC 61,202 at PP 57–88.

<sup>59</sup> NEPGA Protest at 1–4, 7–15; FirstLight Protest at 1–4, 6–8.

<sup>60</sup> Consistent with the Fuel Security Compliance Order.

<sup>61</sup> NEPGA Protest at 15; FirstLight Protest at 8.

<sup>62</sup> NEPGA Supplemental Protest at 4–5.

<sup>63</sup> Id. at 5–7; NEPGA Answer at 5–8.

<sup>64</sup> ISO-NE Answer at 12.

because it pertains to ISO-NE's application of the Tariff.<sup>65</sup> ISO-NE also maintains that FirstLight and NEPGA fail to justify their demand to shift the system-wide demand curve to the right by 1,400 MW, noting that the ICR calculations for FCA 13 already capture the reliability impact of Mystic 8 and 9.<sup>66</sup>

43. As for the difference in the ICR and Fuel Security Study assumptions, ISO-NE explains that it is appropriate to use different assumptions for each because the ICR serves a different purpose than the fuel security reliability review. ISO-NE elaborates that the ICR is designed to estimate the amount of resources needed to meet the reliability requirement prescribed for the New England Control Area, measured as a loss of load expectation of 0.1 days per year. ISO-NE adds that the analyses underlying the ICR rely on a probabilistic, multi-area reliability model that computes how much capacity is available to meet demand during the system peak, which occurs in the summer, given assumptions about maintenance, forced outages, and load.<sup>67</sup> By comparison, ISO-NE explains that the Fuel Security Study examines whether the power plants procured in the Forward Capacity Market are able to obtain and use the fuel they need to produce energy to meet demand, even at load levels that are far below summer peak energy needs. ISO-NE adds that the Fuel Security Study was developed to address winter energy security and reflects a deterministic assessment of the ability of resources to provide energy over the course of an entire winter (and only winter). In sum, ISO-NE characterizes the ICR (and thus, the Forward Capacity Market) as solving an installed capacity problem and the Fuel Security Study as solving an operational energy problem.<sup>68</sup>

#### b. <u>Commission Determination</u>

44. We find that ISO-NE's calculation of the ICR-Related Values comports with its current Tariff,<sup>69</sup> including the assumptions for tie benefits<sup>70</sup> and outages.<sup>71</sup> FirstLight and

<sup>65</sup> NEPGA Answer at 2–5.

<sup>66</sup> ISO-NE Answer at 13.

<sup>67</sup> Id. at 14.

<sup>68</sup> *Id.* at 14–15.

<sup>69</sup> ISO-NE Tariff § III.12 (20.0.0).

<sup>70</sup> Id. § III.12.9 (20.0.0).

<sup>71</sup> *Id.* § III.12.7.3 (20.0.0).

NEPGA's request that the Commission require ISO-NE to recalculate the ICR using alternative assumptions used in the Fuel Security Study is inconsistent with the Tariff.

45. We also disagree with NEPGA and FirstLight's assertions that, because fuel security resources are entered into FCA 13 as price-takers, ISO-NE must use the same tie benefits and outages assumptions in its analyses underlying (1) the calculation of the ICR-Related Values and (2) the Fuel Security Study. These two study processes are distinct and seek to achieve different objectives. The analyses underlying the calculation of the ICR-Related Values use a probabilistic approach and seek to determine the amount of capacity to satisfy system peak load, which occurs in the summer.<sup>72</sup> We find that it is reasonable, for solving a resource adequacy problem, as defined by the criterion established in the Tariff,<sup>73</sup> to use assumptions that reflect system conditions when the system peak load occurs (i.e., in the summer). The analyses underlying the Fuel Security Study use a deterministic approach and are designed to ensure sufficient capacity performance during stressed winter conditions, when fuel supplies are constrained. Also, while ISO-NE uses the ICR-Related Values to address an installed capacity problem, it uses the Fuel Security Study to address a different problem: whether capacity procured in the Forward Capacity Market has sufficient fuel necessary to produce energy needed to meet demand and maintain required operating reserves.<sup>74</sup> That is, a region may have sufficient installed capacity but insufficient fuel to produce energy from that capacity. For these reasons, we are persuaded that these analyses serve different purposes and find it reasonable that ISO-NE uses different assumptions to conduct these analyses.

46. Lastly, we note the Commission's finding in the Fuel Security Compliance Order that the current design of the Forward Capacity Market does not account for fuel security attributes in solving for the resource adequacy problem, which creates the need for a separate Fuel Security Study process in the interim.<sup>75</sup> However, the Commission also reaffirmed in that order its support for market solutions as the most efficient means to provide reliable electric service to New England consumers at just and reasonable rates.<sup>76</sup>

<sup>72</sup> ISO-NE Answer at 14.

<sup>73</sup> ISO-NE Tariff § III.12.1 ("Compliance with this resource adequacy planning criterion shall be evaluated probabilistically, such that the Loss of Load Expectation of disconnecting non-interruptible customers due to resource deficiencies shall be no more than 0.1 day each year.").

<sup>74</sup> ISO-NE Answer at 14–15.

<sup>75</sup> Fuel Security Compliance Order, 165 FERC ¶ 61,202 at P 96.

<sup>76</sup> ISO New England Inc., 164 FERC ¶ 61,003, at P 53 (2018).

Accordingly, the Commission directed ISO-NE to file a long-term market solution to address fuel security concerns by July 1, 2019,<sup>77</sup> noting that it anticipates that the long-term solution will obviate the need to continue to use the interim solution.<sup>78</sup>

#### The Commission orders:

We hereby accept the ICR-Related Values, to become effective January 5, 2019, as discussed in the body of this order.

By the Commission. Commissioner McNamee is not participating.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

<sup>&</sup>lt;sup>77</sup> *ISO New England*, 164 FERC ¶ 61,003 at P 55.

<sup>&</sup>lt;sup>78</sup> Fuel Security Compliance Order, 165 FERC ¶ 61,202 at P 97.

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