

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

New England Power Pool Participants Committee)
ISO-New England Inc.)
)

Docket No. ER24-1710-000

**MOTION TO INTERVENE AND COMMENTS
OF THE
ISO NEW ENGLAND’S EXTERNAL MARKET MONITOR**

Pursuant to Rules 212 and 214 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission, 18 C.F.R. §§ 385.212 and 214 (2019), Potomac Economics respectfully moves to intervene in the above-captioned proceedings. ISO New England (“ISO-NE”) and the New England Power Pool (“NEPOOL”), together the “Filing Parties”, filed on April 5 proposed tariff revisions to delay ISO-NE’s 19th annual Forward Capacity Auction (“FCA19”) until February 2028 to provide additional time for it to work with stakeholders to design and implement a prompt seasonal capacity market and capacity accreditation rules based on marginal reliability value.

Potomac Economics is the External Market Monitor (“EMM”) for ISO-NE and is responsible for monitoring the electricity markets and evaluating potential rule changes that impact these markets. These comments explain our reasons for supporting the proposed delay and the ISO’s efforts to transition to a prompt seasonal capacity market with efficient capacity accreditation rules.

I. NOTICE AND COMMUNICATIONS

All correspondence and communications in this matter should be addressed to:

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II. COMMENTS

The Filing Parties propose to delay ISO-NE's FCA19 from February 2026 until February 2028 to provide additional time for the ISO to work with stakeholders to design and implement a prompt seasonal capacity market and capacity accreditation rules based on marginal reliability value. We have recommended that ISO-NE transition to a seasonal prompt capacity market, which is better adapted to address pressing reliability challenges in New England than the existing Forward Capacity Market ("FCM"). Given the substantial benefits offered by this transition, we support the two-year delay so that the ISO and stakeholders will have time to flesh out a detailed proposal to implement a prompt seasonal capacity market.

The Analysis Group examined the pros and cons of moving to a prompt seasonal capacity market and identified a range of significant benefits, including that the seasonal market would allow for a better implementation of the Resource Capacity Accreditation ("RCA") project.¹ Some stakeholders expressed concerns that a prompt market might lead to inefficient "price formation" in the capacity auctions and more out-of-market retention of capacity for reliability. In addition to addressing these two particular concerns, these comments also summarize the benefits of moving to a prompt seasonal capacity market.

¹ See Filing Parties' filing, dated April 5, 2024, Attachment B *Assessment of Capacity Market Alternatives for a Decarbonized Grid: Prompt and Seasonal Markets*, by Analysis Group, ("AG Report"), esp. pages 2-3.

A. Benefits of a Prompt Seasonal Capacity Market

The FCM was designed when the chief reliability concern was building new gas-fired generating capacity quickly enough to keep up with rapid load growth. The three-year forward auction was thought to facilitate new investment by providing adequate lead time for an investor to mobilize capital, permit, and build a generator after clearing in the auction. However, experience to date has shown that it does not efficiently facilitate investment because developers receive only one year of guaranteed revenue for resources with much longer economic lives and it can create inefficient risk for developers related to the required in-service date. The FCM can also make efficient retirement decisions much more difficult for owners of older resources.

In addition, slowing load growth, the entry of intermittent generation and battery storage, and growing winter fuel supply limitations together create reliability needs and concerns that the FCM cannot effectively address. While New England has sufficient installed capacity, the challenge will be to ensure that the capacity is available to maintain reliability under a wide range of conditions. The capacity market should play a key role in providing incentives for existing generators to arrange for firm gas supply, expand oil tank capacity, and/or increase energy storage duration capability. Even with improvements in capacity accreditation, the timing of the FCM and its lack of seasonal obligations limit its ability to provide efficient incentives.

The failure of the FCM to address the ISO's emerging winter reliability issues is evidenced by the retention of the Mystic generating station and the creation of the Inventoried Energy Product ("IEP"). The IEP is effectively a supplemental out-of-market payment mechanism to address gaps in the current capacity market. Such out-of-market programs are costly and threaten to undermine the performance and incentives of the ISO's energy, ancillary services, and capacity market. Additionally, having an auction for installed capacity that does

not consider whether resources have reliable fuel access leads resources without firm fuel to receive inefficiently high capacity payments.

In a parallel effort, the ISO has been pursuing the RCA project, which would help address winter reliability issues by improving the alignment between the compensation resources receive and the reliability value they provide. The ISO has been working with the goal of implementing the RCA project for the winter of 2028/29, so delaying FCA 19 and implementing a prompt seasonal market by the winter of 2028/29 would help the RCA design in two ways. First, it would allow the ISO more time to work through the details of a more efficient RCA design. Second, RCA rules will perform better in a prompt market because the prompt market allows for more precise estimates of the marginal reliability impact of each technology before the auction.

B. “Price Formation” in Prompt Capacity Markets

In the stakeholder process, some raised concerns that a prompt capacity auction would lead to greater price volatility and would be more prone to periods of oversupply than a forward capacity auction. They believe that a forward auction facilitates competitive responses to surplus and shortfall conditions because it occurs three years ahead while a prompt auction provides little opportunity for competitive responses because it occurs several months before the capacity commitment period. However, this is generally not true for the reasons discussed below.

First, the primary factor that provides for price elasticity in the capacity auction is the sloped demand curve rather than the price-sensitivity of supply offers. The sloped demand curve supports efficient price formation by allowing prices to fall as the amount of surplus capacity rises at a rate that reflects the marginal reliability value of the additional capacity. The principal supply-side factor that determines the clearing price is the quantity of existing qualified capacity. Hence, prices will generally change substantially only when supply is changing significantly and

cause prices to clear much higher or lower on the demand curve. There is no reason to expect larger year-to-year fluctuations in supply than have occurred under the forward capacity market historically. Therefore, price volatility should not be a substantial concern.

Second, the prompt auction format provides more flexibility to existing suppliers than the forward auction, facilitating price-responsive decision-making. In the FCA, decision-timing is highly regimented. Retirements must be noticed more than 50 months ahead of the CCP, while static delist bids are set three months before the FCA and 43 months before the CCP. In a prompt capacity market, suppliers have more flexibility about the timing of decisions related to retirement, which depend on the deadlines for the generator to notify the ISO that it may retire and for a final retirement decision. Most capacity is sold through bilateral transactions and/or voluntary forward auctions ahead of the prompt auction, which allows suppliers to evaluate whether to retire in a timeframe when there are opportunities for bilateral trading. For older generators, this is likely better suited to the timing of factors driving the decision rather than the rigid timelines of the forward auction, which can compel firms to make these retirement decisions prematurely.

Third, some stakeholders are concerned that capacity prices will be prone to clearing below efficient levels because they claim that going forward costs are largely unavoidable for generators participating in a prompt auction. This is not true. Regardless of whether an auction is conducted three years ahead or just a few months ahead, generators will typically consider the fixed cost of operations and maintenance, the need for capital expenditures, and any net revenue offsets. The existing generators with the highest going forward costs are typically ones contemplating capital expenditures that would be recouped over multiple years. Regardless of the auction timing, these decisions depend not only on the outcome of the upcoming auction, but typically also on their price outlook for the subsequent three to five years. The forward auction

provides one year of capacity price certainty, but this has limited value when the decision to sell capacity involves a multi-year capital investment. On the other hand, the prompt auction format tends to facilitate bilateral trading which could allow the generator to enter into a multi-year hedging agreement that is better aligned with the recovery period for its capital expenditures.

Fourth, a key component of the cost for some capacity suppliers is the expected value of the Pay For Performance (“PFP”) obligation, which is largely unaffected by the time between the auction and the capacity commitment period. Since generators that do not accept a CSO can receive PFP credits during reserve shortage events, capacity sellers generally treat this expected payout as a cost when selling capacity. This cost depends on the size and composition of the generation fleet relative to the ICR. This is not likely to differ much between the forward and prompt auction formats, except that generators participating in a prompt capacity market will have better information regarding expected operating and supply conditions since the auction occurs much closer to the operating timeframe than the forward auction.

Fifth, the forward auction is susceptible to a major problem that undermines price formation, which is the problem of phantom new entry. Of the new generating resource capacity sold in the eight auctions for CCP 2016/17 to 2023/2024, 59 percent failed to build in time to reach commercial operation on time and 29 percent were ultimately cancelled.² This has depressed clearing prices in the FCA and sometimes required the ISO to obtain capacity in the reconfiguration auctions. This problem is eliminated under the prompt auction format since generators cannot sell capacity until ready to commence operation.

² See *2022 Assessment of the ISO New England Electricity Markets*, by Potomac Economics, External Market Monitor for ISO-NE, June 2023 (“2022 EMM Annual Report”), pages xii-xiv and Section V.B.

In summary, the prompt auction format does not lead to greater price volatility or uncertainty than the forward auction format. Both formats are similar in the following key respects:

- Both rely on the sloped demand curve for price elasticity in response to supply and demand shocks; and
- Suppliers decide whether to accept a CSO based on their ability to avoid the same going forward costs and/or PFP obligations.

In addition, the prompt auction format has two key advantages that support stable prices:

- The prompt auction format provides more flexibility to suppliers than the forward auction, facilitating price-responsive decision-making; and
- The prompt auction is not susceptible to phantom new entry, which has led to significant price suppression in some FCAs.

For these reasons, the prompt auction format is likely to result in better price formation than the forward auction format.

C. Impact of Auction Format on Out-of-Market Retention of Capacity

Since the creation of centralized capacity markets, a key challenge has been to reduce out-of-market retention for reliability. The most common reason resources are retained out-of-market is that the market does not fully reflect the reliability need the resource is satisfying. For example, ISO New England has from time to time retained resources out-of-market for local reliability needs not reflected in the capacity zone configuration. Likewise, the Mystic Generators 8 & 9 and Everett Marine Terminal are currently being retained out-of-market for their fuel-secure characteristics, which are not yet valued in the capacity market.³

³ Mystic 8 & 9 units were retained for local transmission security in FCA 12 for CCP 2021/22, and the units were retained along with the Everett Marine Terminal for fuel security needs in FCA 13 for CCP 2022/23. See *2019 Regional System Plan*, ISO New England, October 31, 2019, pages 56-58.

Some stakeholders reason that prompt capacity markets are inherently more likely to retain capacity out-of-market for reliability because forward capacity markets provide more time to develop a regulated transmission solution when the retirement of a generating facility would result in a reliability criteria violation. However, this ignores other key factors that determine whether capacity is retained out-of-market, including factors that can lead to more uneconomic retention under the forward auction format.

First, it has become apparent from the retention of the Mystic and Everett Marine Terminal facilities and the progress of the RCA project that when a market enhancement is needed to address a reliability need, it is more difficult to address the need quickly in the context of a forward capacity market. The NYISO's prompt capacity market will allow it to implement marginal capacity accreditation rules much sooner than ISO-NE. The NYISO is introducing marginal accreditation ahead of the summer of 2024, and the NYISO is finalizing a proposal to distinguish among the firm gas, non-firm gas, and oil-fired generators for accreditation purposes once these distinctions are recognized in its resource adequacy assessment.⁴

Second, when a capacity market (regardless of whether it is a prompt or forward market) is designed to set prices efficiently at each location and all reliability needs are reflected in its requirements and resource accreditation, the need to retain resources out-of-market will be very limited. Additionally, when a reliability need is extremely localized, transmission solutions can be evaluated, selected, and constructed more quickly. This reduces the likelihood of a temporary need to retain capacity out-of-market. Hence, if the capacity market compensates resources efficiently, retirement-driven reliability needs are usually so localized that a transmission

⁴ See *Modeling Improvements for Capacity Accreditation*, approved by the NYISO Markets Committee on March 27, 2024. The NYISO's resource adequacy requirements are determined annually by a resource adequacy study performed by the New York State Reliability Council.

solution can be completed in time to allow the generator to retire rather than be retained out-of-market or be retained for a relatively short duration. This is illustrated in the following example.

1. Example of Potential Retention of a Retiring Unit: Forward v. Prompt Market Timing

While the forward capacity market may seem to provide additional time to consider alternatives to retaining a resource out-of-market, there are circumstances when the prompt market provides more time for evaluation before the determination of whether a resource must be retained, thereby reducing the likelihood of out-of-market retention.

For example, suppose an existing generator is considering whether to retire beginning in CCP 5/6 (i.e., the Capacity Commitment Period from June of year 5 to May of year 6). In a forward market, the generator may submit a retirement delist bid in the FCA for CCP 5/6 in April of year 1. If this delist bid is rejected for reliability in the FCA held in February of year 2, the generator will be retained out-of-market in CCP 5/6. After the attempt to delist, the ISO may evaluate reliability needs and consider potential reliability solutions in consultation with stakeholders, but these will not be determined before the FCA for CCP 5/6.^{5,6} Since the retirement delist bid is submitted 50 months before CCP 5/6, it provides a long period to evaluate, select, and build transmission alternatives, but this is only after the unit has been retained out-of-market for CCP 5/6.

In contrast, consider this scenario would play out in a prompt capacity market with a 12-month retirement notification requirement and an expedited process for evaluating reliability needs and solutions. Suppose the generator seeking to retire in CCP 5/6 submits a retirement notice in May of year 4. If the reliability need is very localized, the ISO performs an expedited need assessment in 1-3 months, triggering a review of solutions on a compressed schedule and

⁵ ISO Tariff Section II, Attachment K, Sections 4.1 and 4.2.

⁶ AG Report, Section III.B.4.a.

leaving 3-5 months for construction before CPP 5/6.⁷ If construction can be completed in three to five months, the generator is able to retire without any period of out-of-market retention in the prompt market scenario. If construction takes up to 15 months, the generator is retained for one year (CCP 5/6), the same duration as the forward market. The prompt market would lead to a longer period of uneconomic retention only if the transmission solution was relatively large and took more than 18 months to build, which is unlikely given the state of the transmission system and very low levels of congestion in New England. Hence, while there are circumstances when advance timing of the FCA could help shorten the period of an out-of-market retention, the prompt market allows for a longer period between the retirement notice and the process to evaluate solutions, which could help avoid or limit the duration of out-of-market retention.

2. New York ISO Prompt Capacity Market Experience

Some stakeholders have noted that New York has had several generators retained out-of-market since 2012 and attributed these to the NYISO's prompt capacity market. As the Market Monitoring Unit for the NYISO, we have closely followed developments in the New York market and have found that the auction lead time had very little to do with the out-of-market retention of these generators. As described below, the basis for the retention of each of these generators was that they each provided significant value that was not compensated in the NYISO markets, including: having zero-carbon emission attributes, providing congestion relief, and/or satisfying local reliability needs.⁸ In addition, the procedures used at the time for evaluating

⁷ This assumes ISO New England's tariff could be modified to conduct the need assessments with fewer opportunities for stakeholder input before the study is complete. NYISO has a 12-month notification requirement and a need assessment process that is shorter, requires less collaboration with stakeholders, and allows for the NYISO to move more quickly for a "Immediate Reliability Need" as discussed in NYISO OATT Section 38.

⁸ In addition, the NYISO recently determined that if the air permits of the Narrows GTs and Gowanus GT Barges 2 & 3 are allowed to expire after April 2025, it would result in reliability needs on a portion of the local transmission owner's 138 kV system and for 345 kV circuits into the New York City zone. Consequently, the New York Department of Environmental Conservation ("DEC") can delay the expiration for the air permit for

whether to retain capacity were not optimal for minimizing the quantity and duration of out-of-market retention and have since been revised. Hence, the timing of the auction did not play a significant role in the out-of-market retention of these resources:

- Nuclear Generation – In 2015, the New York Public Service Commission ("PSC") initially retained a 582 MW nuclear facility for reliability, although this was a prelude to retaining 3.3 GW of nuclear units with Zero Emission Credit ("ZEC") payments until 2030.^{9,10}
- Dunkirk & Cayuga Facilities – In 2013, the PSC initially retained these units for 115 kV transmission security¹¹ because they were frequently needed for congestion management on constraint that were not modeled in the NYISO market models. Therefore, the NYISO markets could not provide efficient price signals as we noted at the time.¹²

A few conclusions can be drawn from these cases. First, out-of-market retention has resulted principally because of: (a) failures of the wholesale market to compensate resources that satisfy local congestion management and other local reliability needs of the system, and (b) the desire to retain resources for public policy reasons. Second, these factors would likely have caused each of these units to be retained out-of-market under a forward capacity market construct as well.

Third, the duration of the out-of-market compensation has depended primarily on the preferences and decision-making timeframes of the PSC rather than the amount of time that

up to 48 months. If the Narrows GTs and Gowanus Barges 2 & 3 continue in operation after April 2025, the units are not expected to receive out-of-market compensation given that they were never expected to retire for economic reasons.

⁹ *Order Directing Negotiation of a Reliability Support Service Agreement and Making Related Findings*, State of New York Public Service Commission, Case 14-E-0270, dated November 14, 2014. Numerous comments were received from federal, state, and county government officials highlighting the importance of the plant to the local community, environment, diversity, etc. (see pages 12-14) The order stated: "As the public comments establish, the Ginna facility and its employees are the linchpin of the economic health of the local Wayne County community, and its economic benefits are felt throughout the Rochester region." (see page 23)

¹⁰ *Order Adopting a Clean Energy Standard*, State of New York Public Service Commission, Case 15-E-0302, dated August 1, 2016.

¹¹ See PSC Cases 12-E-0270 and 12-E-0136.

¹² *Market Monitoring Unit Review of the NYISO's 2014 RNA*, dated August 13, 2014.

would have been necessary for the NYISO to evaluate reliability needs and select and construct solutions. Ultimately, the prompt auction format and retirement notification process have been relatively minor contributory factors in New York's retention of resources out-of-market.

Accordingly, it is misguided to think that ISO New England can avoid or even reduce future out-of-market retention of capacity by preserving its forward capacity market.

III. CONCLUSIONS

A prompt capacity market is a superior mechanism for satisfying the planning requirements of New England, especially as it undergoes major changes in resource mix and factors driving reliability risks. In particular, we find that the prompt auction format will provide a wide array of benefits because it:

- Will likely result in better price formation than the forward auction format because:
 - a) it provides more flexibility to suppliers than the forward auction, facilitating price-responsive decision-making; and
 - b) the prompt auction is not susceptible to phantom new entry, which has led to significant price suppression in some FCAs.
- Should facilitate more efficient investment decisions by eliminating unnecessary entry timing risks and better motivating shorter lead-time investments;
- Allows for more efficient retirement decisions by providing the flexibility to shorten the retirement notice deadline to be better aligned with the factors that generally motivate resource retirements;
- Allows for more accurate resource accreditation based on the current portfolio of generation and suppliers' fuel procurement decisions, which ultimately improves the incentives governing these decisions; and
- Will not likely increase the likelihood or frequency of out-of-market retention of resources. If the capacity market compensates resources efficiently, inefficient retirements should be avoided and localized needs created by efficient retirements can typically be addressed by a transmission solution in a timely manner. Consequently,

there is no reason to expect out-of-market retention to be more prevalent under the prompt capacity market than under the forward market.

For the reasons discussed above, we respectfully recommend that Commission approve the Filing Parties' proposal to further delay FCA 19 to provide additional time to transition to a prompt seasonal capacity market and refine the Resource Capacity Accreditation reform proposals before CCP 2028/29.

Respectfully submitted,

/s/ David B. Patton

David Patton
President
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April 22, 2024

CERTIFICATE OF SERVICE

I hereby certify that I have this day e-served a copy of this document upon all parties listed on the official service list compiled by the Secretary in the above-captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated this 22nd day of April 2024 in Fairfax, VA.

/s/ David B. Patton
