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

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| **ISO New England Inc.** | **)** | **Docket No. EL18-182-000** |
| | **)** | **Docket No. ER20-1567-000** |
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# COMMENTS OF NRG POWER MARKETING LLC

Pursuant to Rule 212 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (the "Commission"),[1] NRG Power Marketing LLC ("NRG") respectfully submits these comments to ISO New England's ("ISO-NE") April 15, 2020 filing in the above-refenced docket[2] responding to the Commission's July 2, 2018 Order.[3] In its filing, ISO-NE explains that it has addressed the Commission's concerns by creating long-term market enhancements, known as "Energy Security Improvements" ("ESI"). While NRG supports ISO-NE's proposal to implement these overdue market enhancements, NRG urges the Commission to ensure that ISO-NE continues to pursue the market's evolution, including a seasonal forward market or equivalent.

## I. BACKGROUND

On July 2, 2018, the Commission instituted a Section 206 proceeding after finding that ISO-NE's existing Tariff[4] was no longer just and reasonable in response to an ISO-NE filed

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[1] 18 C.F.R. § 385.212.

[2] *ISO New England Inc.*, Compliance Filing of Energy Security Improvements Addressing New England's Energy Security Problems, Docket Nos. EL18-182 and Docket No. ER20-1567-000 (filed April 15, 2020) ("ISO-NE Filing" or "Filing").

[3] *Order Denying Waiver Request, Instituting Section 206, and Extending Deadlines, ISO New England Inc.*, 164 FERC ¶ 61,003 (2008) ("Order").

[4] ISO-NE Transmission, Markets, and Services Tariff. In addition, capitalized terms used but not otherwise defined in the Filing have the meaning set forth in the Tariff.

petition seeking waiver of multiple Tariff provisions that would have permitted it to retain two retiring generating units owned by Exelon Generation, LLC, for fuel security purposes. The Commission also denied ISO-NE's waiver request. The Commission instituted a Section 206 proceeding and ordered ISO-NE either:

> (1) to submit within 60 days of the date of this order interim Tariff revisions that provide for the filing of a short-term, cost-of-service agreement to address demonstrated fuel security concerns and to submit by July 1, 2019 permanent Tariff revisions reflecting improvements to its market design to better address regional fuel security concerns; or (2) within 60 days of the date of this order, to show cause as to why the Tariff remains just and reasonable in the short- and long-term such that one or both filings is not necessary.[5]

On August 31, 2018, ISO-NE filed its proposal in response to the Commission's Section 206 Order. ISO-NE provided "interim" provisions that are to sunset once the longer-term solution is to be in place, by the start of the FCA 15 Capacity Delivery Period, June 1, 2024.

ISO-NE was to file its long-term fuel security mechanism in July 2019, but after multiple extensions, it was not until April 15, 2020 that ISO-NE filed its ESI proposal. ISO-NE proposes three new ancillary services: (1) Day-Ahead Energy Imbalance Reserve ("EIR") to compensate resources needed to satisfy the ISO's load forecast when it exceeds the market's bid-in Day-Ahead demand; (2) Day-Ahead Generation Contingency Reserve ("GCR") to parallel the existing real-time operating reserves; and (3) Day-Ahead Replacement Energy Reserve ("RER") to restore the system to pre-contingency conditions within reliability standards' prescribed timeframes and to address load forecast errors realized during the Operating Day.[6]

ISO-NE also proposes to eliminate two interim programs that were designed to bridge the gap to the ESI. Specifically, ISO-NE proposes to sunset the Fuel Security Retention Mechanism

[5] Order at P 55.

[6] ISO-NE Filing at pp. 4-5.

that resulted in the retention of approximately 1400 MW of price-taking, price suppressing units, effective for FCA 15. ISO-NE also plans to sunset the Inventoried Energy Program ("IEP") for the second winter it was supposed to be in place, eliminating the program in the winter of 2024-2025.

## II. COMMENTS

### A. ISO-NE's Proposed Changes are an Improved Market Design.

The three new ancillary services proposed by ISO-NE (the Day-Ahead EIR, Day-Ahead GCR, and the Day-Ahead RER, collectively "Day-Ahead Ancillary Services") address deficiencies in the market's current design and increase the market's level of efficiency. As Mr. Brandien states, these three Day-Ahead Ancillary Services "will make transparent the ISO's procurement of the reserves it requires to ensure reliable operation of the New England grid."[7] All of these options will be co-optimized in the Day-Ahead Market, together with energy supply offers and demand bids, and will compensate resources that contribute to ISO-NE's preparation of a reliable Day-Ahead operating plan. ISO-NE has always relied on resources to fulfill these needs, and the ESI make these requirements explicit and will provide market-based compensation for these vital reliability services.

Specifically, the Day-Ahead Energy Imbalance Reserve requirement represents the difference between ISO-NE's forecast of hourly energy demand for the following day and the amount of physical demand bid into the Day-Ahead Market by load-serving entities. ISO-NE has traditionally filled this gap through the out-of-market Reserve Adequacy Assessment ("RAA"), which can create uplift or impact energy or reserve market prices, both of which represent market inefficiencies. Making the Energy Imbalance Reserve an explicit part of the

[7] ISO-NE Filing, Testimony of Peter Brandien at pg.27, 1-3.

Day-Ahead Market will therefore improve market pricing outcomes and provide incentives for both suppliers and load serving entities to schedule efficiently through the markets.

The Day-Ahead Generation Contingency Reserve consists of three new products that are analogous to the existing three Real-time operating reserve products (Ten-Minute Spinning Reserves, Ten-Minute Non-Spinning Reserves and Thirty-Minute Operating Reserves) and will "ensure that this critical reserve capability is procured (as “energy” in reserve) through competitive pricing and scheduling in the Day-Ahead Energy Market."[8] Bringing these reserve option products into the co-optimized Day-Ahead Market will ensure that ISO-NE has a reliable operating plan for the following day, including all necessary contingency operating reserves, based on transparent and efficient market pricing.

Lastly, the Replacement Energy Reserve products, like the Day-Ahead Energy Imbalance Reserve bring a long-standing physical requirement into the market as an explicit constraint based on Northeast Power Coordinating Council and North American Electric Reliability Corporation (“NERC”) requirements to "ensure[s] that there is sufficient replacement energy to be able to restore real-time operating reserve" following a system contingency and ensure that "the market procures the reserve capability necessary to address load forecast errors."[9] ISO-NE has traditionally relied on resources with no Day-Ahead energy schedules to be available to come on-line and ramp up to take over from the region’s quick start resources following a contingency. The new Day-Ahead Replacement Energy Reserve option products will compensate these resources for being available and ready to respond. Like the other ESI reserve option products, this will reveal, through transparent market pricing, the real economic cost of

[8] ISO-NE Filing at p. 37.

[9] *Id.* at p. 34.

securing a reliable Day-Ahead operating plan and ensuring that the region's grid is positioned to withstand and respond to contingency events.

### B. The Commission Should Ensure that ISO-NE Timely Implements a Seasonal Forward Market as Part of its Long-Term Fuel Security Strategy.

#### *1. There is More Work to be Done to Ensure Adequate Compensation for Resources that Provide Energy Security During Gas Capacity Constraints.*

While ISO-NE's Filing provides for improvements that will enhance the wholesale market design, there is more work to be done to fully address fuel security to meet ISO-NE's winter needs. More specifically, the issue is a shortage of megawatt-hours of energy during certain times to meet demand in extended cold weather where a region's fuel supply is constrained.[10]

As Mr. Brandien explains in his testimony, the New England generation fleet is comprised of a growing number of natural gas-fired and renewable resources with just-in-time energy sources.[11] When the natural gas pipeline capacity is constrained in New England, natural gas-fired generation becomes a just-in-time resource and may not be able to reliably provide energy in real-time without advance notice. As New England has increasingly relied on natural-gas fired generation, the physical limitations of the gas pipeline system to simultaneously meet all power generation requirements and building heating needs during sustained events has become more apparent. Therefore, ISO-NE is left with oil-fired generation and coal-fired generation that have significant on-site storage capacity to cover energy supply. However, these

[10] Testimony of Peter Brandien, pg. 10:7-16, *ISO New England Inc.*, Docket No. ER18-1509 (May 1, 2018) ("Waiver Filing").

[11] ISO-NE Filing, Testimony of Peter Brandien at pg.4, 23-26.

are the very same resources that are being retired and will not be replaced once they are lost.[12]

Mr. Brandien elaborates on the conditions that existed on September 3, 2018 that resulted in an energy gap of 2,727MWh arising from generation outage and deviations from the load forecast. Neither of these conditions nor their effect are what comes to mind when discussing the actual fuel security issues. Interestingly, Mr. Brandien's testimony is devoid of the two most concerning fuel security incidents in New England in recent memory, the 2014 Polar Vortex and the 2017/2018 Bomb Cyclone. Although not discussed in this instant filing, ISO-NE recognized in its Waiver filing, during the "Bomb Cyclone" of 2018, a cold snap event that lasted twelve consecutive days from December 26, 2017 through January 9, 2018, "oil- and coal-fired resources contributed a full one-third of all electricity generated in New England, while in the preceding year such resources had provided just two percent (yearly average) of New England's electricity."[13]

Mr. Charles Berardesco, the then Interim President and Chief Operating Officer of NERC, testified on January 23, 2018, before the United States Senate Committee on Energy and Natural Resources that the primary challenge associated with this event was reliably serving electricity demand during record setting winter loads and how a diverse generation mix with adequate flexibility and back up fuel was key to meeting the increased demand.[14]

The Replacement Energy Reserve may be a reasonable mechanism for resources that are already online or that can start up quickly to respond to an intra-day shortage. However, that same product will not typically benefit steam units that take longer to come online. Notably,

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[12] ISO-NE Filing, Testimony of Peter Brandien at pg. 4-5, 23-26.

[13] Waiver Filing, Testimony of Peter Brandien at 13:17-20.

[14] https://www.energy.senate.gov/public/index.cfm/files/serve?File_id=D982B4F9-ECAF-403B-88BA-C82D2634E2DA.

these steam units carry the obvious benefit that once running can meet a fuel security need for days on end due to their large on-site fuel storage capability. History has demonstrated that a diverse resource mix is needed, and resources with fuel stored on-site provide the fuel security needed in such events like the Bomb Cyclone. Yet, ISO-NE—absent additional work as described below—will fall short of providing changes to value these fuel secure resources.

*2. A Seasonal Forward Market Values a Diverse Generation Mix Thereby Providing a Solution to Fuel Security Concerns.*

An integral component of the solution to the fuel security issue is implementing a seasonal forward market. ISO-NE states that it "has been exploring the potential of a seasonal forward market."[15] NRG appreciates the ISO-NE's continued focus on this necessary component to ensure fuel security and energy security as the region's resource mix continues to evolve. To ensure a reliable outcome, ISO-NE must complete development of a longer-term mechanism to procure and value security to fairly compensate all resources that can provide such service in the energy or ancillary markets. With respect to its design, the program should look far enough into the future that market participants can take actionable steps. That might include oil purchases, contracting LNG cargoes, or other actions that would otherwise be unavailable in the middle of a winter cold snap. From NRG's experience in both oil and LNG markets, an appropriate framework will be between four and six months in advance of operations. This should provide adequate notice for market participants—buyers, sellers, shippers and traders—to arrange for delivery or ready access to fuel stocks to meet ISO-NE's energy security goals. Matching the timeframe of the investment decision is a familiar principle in organized electric markets, including ISO-NE's Forward Capacity Market, where the investment decision is new

[15] ISO-NE Filing at pg. 71.

entry and exit. As much as near-term reserve products may support efficient daily operations, the investment decisions for the energy secure fleet in the region need to be made well in advance of the operating day. For many, these investment decisions will not occur on the basis of highly uncertain and potentially volatile Day-Ahead reserve and option market signals. In addition to the aspects noted above, a seasonal forward market for energy security should be fuel- and technology-neutral while establishing a fixed, performance-based payment for providers of the service.

It is the seasonal forward market design and its ability to provide accurate investment signals that will determine whether or not resources like NRG's, with the capability to procure, store, and replenish multiple days of energy on-site and run for extended periods will receive tangible incremental value from the new design to provide energy security services to the region. It is worth noting that once these legacy resources exit the market, there is no comparable replacement to reliably be available on stand-by to run for days on end during the extreme weather conditions that have tested the region in recent years.

*3. The Commission Should Direct ISO-NE to Implement a Seasonal Forward Market that Values Resources with Substantial On-Site Energy Storage.*

The seasonal forward market component is long overdue and a necessary component of energy security market design if New England is to be prepared for the next event of extreme weather. NRG has raised issues regarding fuel security since at least 2018.[16] NRG recommends that the Commission direct ISO-NE to implement a competitive forward fuel resilience market before resources that can reliably obtain or retain on-site fuel permanently retire, leaving the

[16] Comment of NRG Energy, Inc on Resilience Filings, Grid Resilience in Regional Transmission Organization and Independent System Operators, Docket No. AD18-7 (May 9, 2018).

region with only just-in-time fuel sources that are subject to constraint and interruption leading to widespread reliability challenges.

ISO-NE states that it plans to bring the seasonal forward market design through the stakeholder process in 2021 if the Commission issues an order on the compliance filing by November 1, 2020. NRG urges the Commission to require ISO-NE to swiftly file changes to its Tariff to more fully address these outstanding fuel security issues, specifically the seasonal forward market component and to ensure that the forward market provides a path for resources with on-site fuel storage to meaningfully participate.

As explained above, a fuel diverse resource mix is essential to fuel security. History has demonstrated that resources with on-site fuel are necessary in New England where constraints on the natural gas system could hinder natural gas units from coming online in extreme weather events. On-site fuel resources should be valued for the fuel security that they provide to the New England market. The eventual departure of such critical resources with plentiful on-site fuel storage capabilities will decrease system resilience and markedly exacerbate the region's fuel security challenges. Therefore, it is imperative for ISO-NE to act as soon as possible.

NRG requests that the Commission ensure the ISO-NE makes good on the commitment to develop this forward market and establish a date-certain by which ISO-NE will propose a just and reasonable seasonal forward market component. NRG proposes that a timeframe of no more than 120 days from the date of a Commission order in this proceeding is reasonable.[17] For context, ISO-NE has asked for an Order by November 1, 2020. Presuming an order by

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November 1, 2020, ISO-NE's filing regarding a forward market component would be in March 2021. This gives the ISO-NE nine months to complete this work and is consistent with timeline provided in this Filing. Putting a firm compliance obligation on ISO-NE will aid in the stakeholder process and make sure that this additional, yet important component of the fuel security framework could be implemented concurrent with the anticipated implementation of ISO-NE's instant Energy Security Improvement proposal.

### C. The Commission Should Approve ISO-NE's Request to Sunset the Fuel Security Retention Mechanism and the IEP in order to Provide for Successful Implementation of the Energy Security Improvements.

NRG further requests that the Commission approve ISO-NE's request to sunset two out-of-market programs, the Fuel Security Retention Mechanism and the IEP. Both of these programs were designed as interim measures. The Fuel Security Retention Mechanism allows for certain units at the Mystic Generating Station to participate as price-takers in ISO-NE's Forward Capacity Auctions.[18] ISO-NE acknowledges that allowing resources compensated through the Fuel Security Retention Mechanism to participate in the FCM as price-takers will result in lower prices, as market participants have seen in the most recent two Forward Capacity Auctions.[19] Lower prices have reduced the revenues of other fuel-secure resources. The continuation of such price suppressive behavior may lead to additional fuel-secure units to retire despite the valuable reliability service they provide to the market.

[18] *ISO New England Inc.*, 165 FERC ¶ 61,202 at P 87 (December 3, 2018) ("December 3 Order").

[19] *ISO New England Inc.*, Compliance Filing to Establish a Fuel Security Reliability Standard, Short-Term Cost-of-Service Mechanism, and Related Cost Allocation for Out-of-Market Compensation Docket Nos. EL18-182 and Docket No. ER18-2364, at pgs. 4, 17 (filed August 31, 2018) ("ISO Filing").

Moreover, the Commission has consistently expressed its strong support for competitive markets to accomplish reliability outcomes in the most cost-efficient manner. ISO-NE's request to sunset the Fuel Security Retention Mechanism and the IEP is consistent with maintaining competitive markets. ISO-NE states "market design can only function if it can competitively price the reliability need without interference from out-of-market measures that provide the same services under a non-market price."[20] Retaining uneconomic price-taking units that affirmatively sought to exit the market two auctions ago, representing 4% of the capacity that cleared in the last forward capacity auction, will no doubt postpone the correct economic outcome. Although ISO-NE's long-term fuel security solution requires additional development to fully address the system's need for a fuel-secure and energy-secure future contemplated by the Commission, retaining uneconomic price-taking units places other fuel diverse resources in jeopardy, and most importantly hinders the ESI proposed by ISO-NE. Therefore, for the ESI to succeed, NRG requests that the Commission approve ISO-NE's request to sunset the Fuel Security Retention Mechanism and the IEP while simultaneously ensuring the addition of a seasonal forward enhancement for that delivery year.

[20] ISO-NE Filing at pg. 6.

## III. CONCLUSION

For the aforementioned reasons, the NRG respectfully request that the Commission accept ISO-NE's filing and direct ISO-NE to expeditiously work on its seasonal forward market proposal.

May 15, 2020

Respectfully submitted,

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## Certificate Of Service

I hereby certify that I have served a copy of the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Atlanta, Georgia this 15th day of May 2020.

/s/ *Jennifer S. Hsia*