

COMPLAINT REQUESTING FAST TRACK PROCESSING

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New England Power Generators)
Association,)
)
Complainant)
)
v.)
)
ISO New England Inc.)
)
Respondent.)

Docket No. EL18-____-000

*COMPLAINT AND REQUEST FOR EXPEDITED CONSIDERATION
OF THE NEW ENGLAND POWER GENERATORS ASSOCIATION*

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COMPLAINT AND REQUEST FOR EXPEDITED CONSIDERATION

The New England Power Generators Association (“NEPGA”) hereby files this complaint against ISO New England Inc. (“ISO-NE”) under section 206 of the Federal Power Act to prevent unjust and unreasonable and unduly discriminatory pricing in at least the next two Forward Capacity Auctions (FCA 13 and FCA 14). ISO-NE has sought Commission waivers of the ISO-NE tariff to permit it to retain or “hold” resources needed for fuel security rather than allowing them to retire, specifically Mystic Station Units 8 & 9 in Boston. As part of this proposed arrangement, Mystic’s 1,400 megawatts of capacity will be bid into FCA 13 and FCA 14 at zero, potentially displacing as much as 1,285 megawatts of otherwise economic resources and suppressing capacity prices by as much as \$642 million in FCA 13 alone, with the potential for even greater displacement and price suppression in FCA 14. This capacity must instead be offered at its retirement price, as mitigated, and NEPGA offers one possible mechanism for how to clear the capacity—a market-based approach very similar to the “CASPR” proposal that the Commission approved in ISO-NE a few months ago.

NEPGA’s sole focus with this complaint is to ensure just and reasonable prices in FCA 13, FCA 14 and subsequent capacity auctions. NEPGA takes no position on the

precipitating issue of the retention of fuel security resources—including Mystic Units 8 & 9—except with respect to the effect of such actions to suppress capacity prices. ISO-NE’s capacity market cannot withstand any further price suppression. And it is difficult to conceive of anything more detrimental to resilience and fuel security in New England than requiring the very resources needed for fuel security to suppress capacity prices and distort market signals for all other capacity suppliers, including those that also provide fuel security attributes to the region. ISO-NE and stakeholders should debate and seek to implement long term solutions, but the Commission must take immediate action to ensure the opportunity for just and reasonable capacity prices in FCA 13 and FCA 14.

NEPGA is also filing a conditional protest of ISO-NE’s waiver petition in Docket No. ER18-1509-000, again focused solely on the price suppression impact in the capacity market. NEPGA files this separate complaint to ensure that the issue of just and reasonable capacity prices in FCA 13 is squarely queued up for the Commission.

EXECUTIVE SUMMARY

The Commission is working to address energy resilience concerns.¹ ISO-NE has detailed how “[i]n New England, the most significant resilience challenge is fuel security,”² and the most significant threat to fuel security is the retirement of “the region’s older oil, coal, and nuclear generators with fuel on-site.”³ ISO-NE also has warned that these very

¹ See, e.g., *Grid Resilience in Regional Transmission Organizations and Independent System Operators*, 162 FERC ¶ 61,012 (2018).

² “Response of ISO New England Inc.,” *Grid Resilience in Regional Transmission Organizations and Independent System Operators* (Docket No. AD18-7-000) (filed Mar. 9, 2018) (“ISO-NE Resilience Response”) at 1.

³ *Id.* at 34; see also ISO New England Inc., *Operational Fuel-Security Analysis* at 48 (“The retirements of oil- and coal-fired plants *have the greatest impact* among the five variables [studied by ISO-NE] on increasing the

resources “are becoming less economically competitive and may seek to retire before the region has addressed the fuel-delivery constraints, or added sufficient alternative resources to replace them.” ISO-NE Resilience Response at 34 (emphasis added).

ISO-NE’s warning about resources “becoming less economically competitive” has come to pass. As a result of being unable to “recover future operating costs including the cost of securing fuel” in the ISO-NE markets, Mystic Units 8 & 9 have sought to retire.⁴ Mystic Units 8 & 9 are no ordinary units. In addition to being among the largest and most fuel-efficient units in ISO-NE, and being just north of Boston, Mystic Units 8 & 9 also burn Liquefied Natural Gas (“LNG”) stored (essentially) on site. ISO-NE has determined that Mystic Units 8 & 9 (and the additional LNG vaporization capability at Distrigas) are essential to fuel security and has proposed tariff waivers to permit the units to seek an out-of-market contract and continue operations for at least two years beyond their current commitments to remain in service through May 31, 2022.

NEPGA is focused on the impact of these actions on capacity auction prices. While there is nothing in the tariff addressing fuel security issues (hence ISO-NE’s waiver requests), ISO-NE proposes to treat resources held for fuel security the same way that its tariff treats resources held for local transmission reliability and thus to offer fuel security resources as price-takers in the capacity auction. This means that Mystic Units 8 & 9’s 1,400 megawatts of capacity will—absent Commission intercession—be offered into FCA 13 and FCA 14 at

region’s fuel-security risk.”) (emphasis added) (“ISO-NE Fuel-Security Analysis”), available at https://iso-ne.com/static-assets/documents/2018/01/20180117_operational_fuel-security_analysis.pdf.

⁴ Press Release, Exelon Corp., Exelon Generation Files to Retire Mystic Generating Station in 2022, Absent Any Regulatory Solution (Mar. 29, 2018), available at <http://www.exeloncorp.com/newsroom/exelon-generation-files-to-retire-mystic-generating-station-in-2022>.

zero (as a price-taker), rather than at a price that reflects the actual cost of providing capacity from these units. This proposed treatment would render the ISO-NE tariff unjust and unreasonable and unduly discriminatory against every resource relying upon the capacity auctions for a just and reasonable rate.

First, permitting Mystic Units 8 & 9 to offer capacity at zero will severely suppress capacity prices, potentially in the range of \$214-\$642 million in FCA 13 alone, with similar or greater suppression in FCA 14 and potentially subsequent auctions.⁵

Second, it will potentially displace between 1,050-1,285 megawatts of otherwise economic resources in the form of premature retirements and deterred new entry (including the new resources ISO-NE is relying upon to help replace retiring generation).⁶ In fact, it would cause FCA 13 and FCA 14 to fail most of the Commission's first principles of capacity markets. *See ISO New England Inc.*, 162 FERC ¶ 61,205 (2018) at P 21 ("CASPR Order").⁷

Third, permitting Mystic Units 8 & 9 to offer capacity at zero in FCA 13 and FCA 14 will exacerbate fuel security concerns. The number one threat to fuel security in New England is the retirement of oil-, coal- and nuclear-fired resources and other "fuel secure" resources, most of which are older and already "becoming less economically competitive." ISO-NE Resilience Response at 34. Artificially low capacity auction prices are more likely than nearly anything else to push these resources over the economic cliff. Their best

⁵ See Affidavit of Dr. Paul Sotkiewicz, Exhibit 1 hereto, at ¶¶ 15-21. Dr. Sotkiewicz is formerly the Chief Economist at the PJM Interconnection, LLC, Director of Energy Studies at the Public Utility Research Center, University of Florida, and Economist at the Commission. Dr. Sotkiewicz has estimated the potential price suppression caused by Mystic Units 8 & 9 in FCA 13 and otherwise provides supporting evidence for this complaint.

⁶ *Id.* at ¶¶ 15-16.

⁷ *Id.* at ¶¶ 35-65.

alternative will likely be to retire unless they too are deemed essential for fuel security and can obtain their own cost-of-service contract. And cost-of-service contracts typically beget more cost-of-service contracts.

Fourth, every auction matters. Price suppression and price formation issues are well known and longstanding in the ISO-NE capacity market, with capacity prices continuing to fall each year even as fuel security (and therefore resilience) concerns get worse. The capacity market simply does not have the “capacity” to tolerate any further price suppression. ISO-NE promises to work towards a long term, market-based solution to the fuel security issue. NEPGA supports those efforts, but they are no substitute for taking action now to prevent unjust and unreasonable prices in FCA 13, FCA 14 and subsequent auctions until a long term solution is implemented. The answer cannot be “just wait ’til next year.”

The Commission must provide relief now, in time for the next capacity auction, by requiring ISO-NE to adopt an approach that accounts for the capacity of fuel security resources in a way that prevents price suppression. NEPGA is not wedded to any single approach to ensure that the Mystic Units, once contracted for fuel security service, have a Capacity Supply Obligation (or equivalent obligations), but Mystic’s capacity must be offered at a price that reflects its actual costs, its Retirement De-List price, as mitigated. In this complaint we also propose a market-based solution modeled on the CASPR mechanism the Commission recently approved in ISO-NE that will ensure that Mystic 8 & 9 also obtain a Capacity Supply Obligation (or the equivalent).⁸ Like CASPR, our proposal would allow

⁸ See generally CASPR Order. “CASPR” stands for Competitive Auctions with Sponsored Policy Resources and it was designed to accommodate state-sponsored out-of-market entry via a market-based mechanism without suppressing capacity auction prices.

resources needed for fuel security with out-of-market cost-of-service contracts to obtain a Capacity Supply Obligation without suppressing capacity market prices. The capacity would be offered in the capacity auction at its de-list price (subject to normal mitigation rules). If it cleared (*i.e.*, if the price fell below its de-list offer and it failed to obtain a Capacity Supply Obligation), it would be held for fuel security and subsequently allowed to participate in the Annual Reconfiguration Auctions as supply. The effect would be that the held resource would obtain a Capacity Supply Obligation without suppressing forward capacity auction prices, with load acquiring the associated capacity at a rate dictated by the Annual Reconfiguration Auction Marginal Reliability Impact (“MRI”) demand curve.

There are other potential remedies, but this one is similar in concept and execution to CASPR, is market-based and is easily implementable in time for FCA 13. It will *not* jeopardize fuel security or reliability. And it eliminates any potential choice between fuel security and price suppression in the capacity market. The Commission can and must provide for fuel security without suppressing capacity prices in FCA 13 and FCA 14, and NEPGA’s proposal does just that.

There will be those who argue that some price suppression is justified because it will only be in a couple of auctions, or that the price suppression will not be that great because there will not be that much zero-priced capacity, or the new sloped demand curve or pay-for-performance mechanism will counteract the suppression, or that the zero-priced capacity will be offset by competitive entry or load growth, or that the Commission need only worry about price suppression caused by new entry. The Commission itself has in the past occasionally subscribed to such arguments in other contexts. None apply here.

Regardless, the Commission’s treatment of capacity market price suppression has evolved over time. In the CASPR Order, the Commission approved a market-based approach that prevents price suppression in the Forward Capacity Auctions even as it accommodates out-of-market state-sponsored entry. The Commission held that “[w]here participation of resources receiving out-of-market *state* revenues undermines [the first] principles [of capacity markets], *it is our duty under the FPA to take actions necessary to assure just and reasonable rates.*” CASPR Order at P 21 (emphasis added); *see also* Jasmin Melvin, *Integrating State Policies With Wholesale Markets Among FERC’s Toughest Challenges: McIntyre*, MEGAWATT DAILY, May 8, 2018 (Chairman McIntyre describing the “unshakable statutory obligation to ensure the justness and reasonableness of the markets”).

The same reasoning squarely applies here to “resources receiving out-of-market [contract] revenues” for fuel security. The unjust and unreasonable harm inflicted upon the capacity market is the same regardless whether the out-of-market revenues come from a state program or a cost-of-service contract. CASPR provides precedent and a worthy model for how to treat out-of-market fuel security resources in FCA 13 and FCA 14, and past instances where the Commission has allowed price suppression in the capacity auction should not be replicated here.

BACKGROUND

I. PARTY DESCRIPTIONS

NEPGA is a private, non-profit entity that advocates for the business interests of non-utility electric power generators in New England. NEPGA’s member companies⁹ represent

⁹ This complaint reflects the positions of the NEPGA organization, which does not necessarily reflect the position of each member company.

approximately 26,000 megawatts of electrical generating capacity throughout the New England region.

ISO-NE is the RTO for the six New England states. It administers the ISO-NE tariff and operates the bulk power markets in New England.

II. STATEMENT OF FACTS

See the Executive Summary for a recitation of the pertinent facts.

COMPLAINT

I. FUEL SECURITY RESOURCES CANNOT BE ALLOWED TO BID THEIR CAPACITY AT ZERO

The decision to treat generators held for fuel security as price-takers in the capacity auction is unjust and unreasonable and unduly discriminatory because it will: (1) severely suppress capacity prices and displace economic resources in FCA 13 and FCA 14 and perhaps additional auctions; (2) jeopardize the viability of the capacity markets; and (3) exacerbate the region's fuel security concerns.

A. FCA 13 and FCA 14 Will Be Unjust and Unreasonable

1. FCA 13 and FCA 14 Prices Will Be Severely Suppressed

Treating Mystic 8 & 9 and any future generators needed for fuel security as price-takers in the Forward Capacity Auction will *severely* suppress capacity prices. In order to quantify the impact of treating the Mystic Units as price-takers, Dr. Sotkiewicz performed an analysis of market clearing prices for FCA 13 and FCA 14 based on information derived from historical auction results and other information published by ISO-NE. In order to establish the range of likely outcomes, Dr. Sotkiewicz performed his analysis using both a supply curve that is relatively flat in the area where supply and demand intersect (*i.e.*, relatively elastic to

changes in price) and a supply curve that is steeper where demand and supply intersect (*i.e.*, more inelastic to changes in price).

As detailed in the attached affidavit, Dr. Sotkiewicz estimates price suppression in FCA 13 alone in the range of \$214 to \$642 million. Dr. Sotkiewicz Aff. at ¶¶ 15-16. More specifically, assuming a flatter supply curve, treating Mystic Units 8 and 9 as price-takers would result in a \$0.51/kW-per month reduction in market clearing prices from \$4.63/kW-month to \$4.12/kW-month. *Id.* at ¶ 15. In other words, offering Mystic Units 8 and 9 into FCA 13 under this scenario would result in an 11% reduction in market clearing prices below the prices that would have resulted if these units' de-list bids were simply permitted to clear the FCA. *Id.* The effects of treating Mystic Units 8 and 9 as price-takers are even more significant assuming a steeper supply curve. In that scenario, the effect of treating Mystic Units 8 and 9 as price-takers would be a reduction in price of \$1.52/kW-month from \$4.63/kW-month to \$3.11/kW-month, representing a 33% decrease below competitive levels. *Id.* at ¶ 16.

The effects of treating the Mystic Units as price-takers in FCA 13 would not be limited to a single auction, but are likely to carry over to FCA 14 and subsequent auctions as well. As described in detail in Dr. Sotkiewicz's affidavit, it is likely that resources that failed to clear FCA 13 due to the price suppression associated with the participation of the Mystic Units would seek to retire and submit de-list bids. *Id.* at ¶ 19. To the extent that ISO-NE sought to retain a portion of these resources for fuel security such that these resources were treated as price-takers in FCA 14, the result would be further suppression of prices and the displacement of additional otherwise economic resources. For example, Dr. Sotkiewicz estimates that a decision by ISO-NE to seek to retain 1,000 MW of this capacity in FCA 14

would result in additional price suppression in the range of \$366 million to \$1.1 billion in FCA 14. *Id.* at ¶¶ 20-21. Thus, the overall impact over FCA 13 and FCA 14 would be a cumulative decline in capacity market revenues from \$580 million to \$1.75 billion. *Id.*

In short, Dr. Sotkiewicz' analysis demonstrates that treating Mystic Units 8 and 9 as price-takers is likely to result in significant suppression of prices below competitive levels under a wide range of circumstances.

2. *Price Suppression Defeats Just and Reasonable Rates*

This price suppression will render the rates arising out of FCA 13 and FCA 14 (and perhaps subsequent auctions) unjust and unreasonable and unduly discriminatory. Mystic 8 & 9 seek a two-year contract, thus impacting both FCA 13 and FCA 14, and additional generators may find themselves in similar circumstances next year going into FCA 14. The risk of price suppression associated with fuel security could persist until a long-term solution is in place, which ISO-NE has estimated could take until the beginning of the FCA 16 Capacity Commitment Period, June 1, 2025. *See* "Petition of ISO New England Inc. for Waiver of Tariff Provisions," (Docket No. ER18-1509-000) (filed May 2, 2018) ("ISO-NE Waiver Petition") at 32.

The Forward Capacity Auction is a crucial part of ISO-NE's filed rate, approved by the Commission under FPA section 205. *ISO New England Inc.*, 119 FERC ¶ 61,045, *order on reh'g*, 120 FERC ¶ 61,087 (2007). As detailed by ISO-NE, the Forward Capacity Market's

capacity clearing price guides competitive entry and exit decisions for the region, is essential to achieving the region's resource adequacy over the long term, and is the basis for billions of dollars in payments to more than 30 GW of capacity resources each year – a sum that determines [the Forward Capacity Market]'s cost to consumers.

“Revisions to ISO New England Transmission, Markets and Services Tariff Related to Competitive Auctions with Sponsored Policy Resources,” (Docket No. ER18-619-000) (filed Jan. 8, 2018) (“ISO-NE CASPR Filing”) at 5. The Commission itself has listed the “first principles of capacity markets,” which it set forth in the CASPR Order:

A capacity market should facilitate robust competition for capacity supply obligations, provide price signals that guide the orderly entry and exit of capacity resources, result in the selection of the least-cost set of resources that possess the attributes sought by the markets, provide price transparency, shift risk as appropriate from customers to private capital, and mitigate market power.

CASPR Order at P 21. As the Commission explained, the purpose of basing capacity market constructs on these principles is to “produce a level of investor confidence that is sufficient to ensure resource adequacy at just and reasonable rates.” *Id.*

All of this law and logic from the CASPR proceeding applies with equal force in this proceeding. Price suppression defeats the first principles of capacity markets and the capacity market’s other objectives and results in an unjust and unreasonable rate. *See New England States Comm. on Elec. v. ISO New England, Inc.*, 142 FERC ¶ 61,108 at P 35 (2013) (“*NESCOE*”); *PJM Power Providers Group v. PJM Interconnection, L.L.C.*, 137 FERC ¶ 61,145 at PP 3, 96 (2011); *PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,157 at P 90 (2009). This is particularly true when the price suppression is large, as will be the case here—we believe larger than all of the combined state-sponsored entry in all prior auctions

The Forward Capacity Auction rate is just and reasonable only so long as generators have a reasonable opportunity to recover their costs on average and over time. *See, e.g.*, CASPR Order at P 24 (stating that out-of-market resources can suppress capacity market prices to levels that deprive resources “of the opportunity to recover their investment costs through the capacity market”); *Bridgeport Energy, LLC*, 113 FERC ¶ 61,311 at P 29 (2005)

(noting that, in a competitive market, the Commission is responsible for ensuring that a generator has a reasonable opportunity to recover its costs). The Forward Capacity Market, in turn, is supposed to be designed to permit revenues roughly equal to the net cost of new entry over time. *See ISO New England Inc.*, 155 FERC ¶ 61,023 at n.41 (2016) (“Net CONE is an administrative estimate of the capacity clearing price on average over time that prospective new entrants would require, when the region is short of its resource target, in order to justify the new entrant’s decision to build a resource in New England.”); *PJM Interconnection, L.L.C.*, 155 FERC ¶ 61,157 at P 67 (2016) (“Over time capacity prices should approximate Net CONE, the cost of new entry, since this is the price required to cover the costs of the new plants needed as load grows and existing plants retire.”). None of this is possible—barring extreme shortage conditions—in the face of the price suppression anticipated here. Instead, the likely result of treating Mystic Units 8 and 9 as price-takers in FCA 13 and FCA 14 will be the subsequent retirement of resources that otherwise would have been economic but for artificially suppressed prices. *Dr. Sotkiewicz Aff.* at ¶¶ 22-28.

Price suppression also results in an unduly discriminatory rate. *See PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,157 at P 112 (2009) (finding that implementation of an offer floor for the participation of resources that had “locked-in” the capacity clearing price from its first auction was necessary to prevent discriminatory pricing impact associated with reducing compensation to other suppliers). In contrast to the Mystic Units and any other fuel security resources retained for reliability, existing generators have no choice but to participate in the capacity market or attempt to retire. There is no other rate for them to be paid. The only exception is if generators can find their own out-of-market revenue stream.

The tariff as modified by ISO-NE's waiver petition would permit this price suppression and therefore is unjust and unreasonable.

3. *Economic Resources Will Be Displaced*

Treating fuel security resources as price-takers in FCA 13 and FCA 14 not only will reduce prices below competitive levels but, in doing so, will also distort market signals. "Price suppression alters the market's ability to retain and justly compensate needed existing resources and to attract new, competitively-compensated resources. Moreover, if competitive new entry does occur, its cost can be substantially increased." ISO-NE CASPR Filing at 2. Indeed, ISO-NE specifically acknowledges that allowing Mystic 8 & 9 to participate in the capacity market as price-takers has the potential to "suppress market clearing prices and *deter investment in new generation.*" ISO-NE Waiver Petition at 33 (emphasis added) (quoting *Milford Power Co.*, 119 FERC ¶ 61,167 at P 31 (2007)).

This is correct. Dr. Sotkiewicz estimates that allowing Mystic 8 & 9 to offer at zero in the capacity auction will displace between 1050 to 1285 MW of economic capacity in FCA 13 alone. Sotkiewicz Aff. at ¶¶ 15-16. This is an estimate, but:

Regardless of whether the impact is at the lower bound or upper bound estimates, or somewhere in between, the damage to the market is significant both in terms of artificial price suppression and the inefficient displacement of lower cost resources. This inefficient allocation of CSOs raises the overall costs of meeting ISO-NE's ICR. But even more importantly, particularly in the wake of ISO-NE's fuel security report, treating Mystic Units 8 and 9 as price-takers may further displace resources ISO-NE needs to ensure fuel security during the winter season.

Id. at ¶ 17. Dr. Sotkiewicz further estimates that treating Mystic 8 & 9 as a price taker would result in the incremental displacement of between 775 MW to 918 MW in FCA 14. *Id.* at ¶¶ 20-21.

In addition, treating the Mystic Units as price-takers effectively sends the exact opposite price signal to the market that should be sent where a large resource such as the Mystic Units seeks to retire. As Dr. Sotkiewicz observes, “[a]s resources that are critical to reliability want to retire, prices should go up to signal to potential new entrants or existing resources that adding fuel secure capabilities is needed and will be rewarded. Instead, prices are falling and there is no incentive to add or retain fuel secure capabilities until a cost-of-service contract is offered by ISO-NE.” *Id.* at ¶ 27.

Treating fuel security resources as price-takers will result in market prices that are unconnected to the actual cost of maintaining reliability in the ISO-NE region. By artificially suppressing prices, the participation of these resources also will displace other resources that would be otherwise economic in meeting regional reliability needs. Some existing generators will seek to retire; some potential new entrants will defer entry. In neither case will the decision have anything to do with market fundamentals. This is far afield from one of the first principles of a capacity market to “provide price signals that guide the orderly entry and exit of capacity resources.” CASPR Order at P 21.

B. The Capacity Market Cannot Withstand Further Price Suppression

Even before the artificial price suppression and displacement of economic resources anticipated by the proposed tariff treatment here, the ability of the Forward Capacity Market to achieve its objective of attracting investment necessary to maintain reliability has already been seriously compromised by existing levels of price suppression. At the same time that concerns about fuel security have continued to grow, capacity market prices have plummeted. More specifically, as shown in Table 1 below, capacity clearing prices have decreased precipitously over the past four FCAs, falling by approximately 51.5% from

\$9.55/kW-month to \$4.63/kW-month between FCA 9 held in February 2015 and FCA 12 held in February 2018. In addition, capacity prices in FCA 11 and FCA 12 were approximately 54% and 42% below Net CONE, respectively.

Table 1:

FCA	Net-Cone	Price	% Price Decline Year to Year	% less than Net-Cone
9 (Feb. 2015) ¹⁰	\$11.08/kw mo.	\$9.55/kw/mo. ¹¹		13.81%
10 (Feb. 2016) ¹²	\$10.81/kw mo.	\$7.03-kw/mo.	26.39%	34.97%
11 (Feb. 2017) ¹³	\$11.64/kw mo.	\$5.30-kw/mo.	24.61%	54.47%
12 (Feb. 2018) ¹⁴	\$8.040/kw mo.	\$4.63-kw/mo.	12.64%	42.41%
% Decline in Price from FCA 9 to FCA 12				51.52%
Average Annual Decline in Price				21.21%
% Difference in FCA 12 Net-Cone to FCA 12 Price				42.41%
% Difference in FCA 9 Net-Cone to FCA 12 Price				58.21%
Average Annual Difference in FCA Price to Net-CONE -- FCA 9 to FCA 12				36.4%

Energy prices likewise have been low—except during brief winter periods when there is a shortage of natural gas availability in New England. Given these trends, it is unsurprising that resources are considering retirement, the event precipitating ISO-NE’s fuel security concerns and being forced to turn to out-of-market procurement to maintain fuel security.

Numerous aspects of the existing FCA design—including recent design changes—have the effect of suppressing capacity prices. These include:

¹⁰ FCA 9 set the prices to be paid for capacity during the 2018-2019 Capacity Commitment Period.

¹¹ \$9.55/kw-mo. Reflects the Rest of System Price. The Payment Rate for Existing Resources located in SEMA-RI [Southeast Massachusetts Rhode Island zone] equaled Net-CONE (11.080/kW Month) and the Payment Rate for New Resources was the FCA 9 Starting Price (\$17.728 /kW Month).

¹² FCA 10 set the prices to be paid for capacity during the 2019-2020 Capacity Commitment Period.

¹³ FCA 11 set the prices to be paid for capacity during the 2020-2021 Capacity Commitment Period.

¹⁴ FCA 12 set the prices to be paid for capacity during the 2020-2021 Capacity Commitment Period.

- The price treatment of resources that “lock in” the clearing price for up to seven years under the New Entry Price Rule, which allows new generation resources to reduce their offers in the initial Forward Capacity Auction below competitive levels, because of the guaranteed revenue stream that will continue through the rate lock period, and then to submit zero-price offers in the FCAs subsequent to the clearing year;
- The requirement that uneconomic resources retained to address local transmission reliability concerns be offered into the Forward Capacity Auction as price-takers, as occurred as recently as FCA 12;
- The Renewable Technology Resource exemption, which permitted up to 200 MW of renewable resources to be exempt from the Minimum Offer Price Rule (“MOPR”) in each Forward Capacity Auction and effectively allowed these resources to participate in the auction as price-takers;
- The decision to transition from the use of a demand curve designed to clear at 20% more than Net CONE on average and over time to offset the potential for price suppression to zonal and system-wide marginal reliability impact demand curves that do not contain any of these same protections;
- Changes to the way zonal reliability targets are set that further reduce local purchase requirements; and
- The decision to reduce the Net CONE value used for the purpose of establishing the MOPR bid floor and other aspects of the FCA by 30% in FCA 12.

While NEPGA and other parties have expressed concern that these design elements would have the effect of undermining the ability of the capacity market to achieve its long-term objectives, the Commission has consistently dismissed these concerns and predicted that the market would still clear near Net CONE when conditions warranted despite these design changes. *See, e.g., ISO New England Inc.*, 150 FERC ¶ 61,065 at P 21 (2015) (claiming that load growth and other factors would offset any price suppression associated with the Renewable Technology Resource exemption and ensure that market clearing prices approximated Net CONE). Unfortunately, these predictions have proven incorrect, with ISO-NE recently acknowledging that the market is likely to clear below Net CONE for the “foreseeable future.” CASPR Filing at 11.

NEPGA emphasizes that it is not seeking to re-litigate any element of the existing FCA design and that this complaint is focused solely on ensuring that the participation of resources retained for fuel security does not further suppress capacity prices. Nevertheless, it is important to recognize that the effects of price suppression are cumulative and contribute to the fuel security concerns that ISO-NE is attempting to address through its waiver petition. In particular, as further described in the affidavit of Dr. Sotkiewicz, price suppression associated with the participation of out-of-market resources in the capacity market has the potential to result in a “death spiral” towards greater reliance on out-of-market procurement:

- Price suppression occurs in the capacity auction as a result of out-of-market resources submitting offers below their actual costs.
- Low capacity market prices lead other resources necessary to maintain reliability and resilience to seek to exit the market and retire.
- ISO-NE is forced to provide out-of-market compensation to these resources to maintain reliability.
- These resources are then offered into the capacity market as price-takers, which, in turn, further suppresses capacity prices and results in additional resources seeking to exit the market and increased reliance on out-of-market procurement to maintain reliability.

Dr. Sotkiewicz Affidavit at ¶¶ 22-28. “[S]uppressed market clearing prices further erode the ability of other generators to earn competitive revenues in the market and increase the likelihood that additional units will also require RMR agreements to remain profitable.” *Devon Power, LLC*, 103 FERC ¶ 61,082 at P 29 (2003). ISO-NE acknowledges in its waiver petition that it is the inability of the Mystic facility to earn sufficient revenues through the energy and capacity markets to recover its costs that has led Exelon to seek to retire the facility. ISO-NE Waiver Petition at 1-2 (“According to Exelon, under current market rules in

New England, ‘critical units to the region ... cannot recover future operating costs including the cost of securing fuel.’”).

In sum, the Forward Capacity Auction market is not in any condition to tolerate any more price suppression, especially on the scale contemplated in ISO-NE’s Waiver Petition.

C. Fuel Security Risks Will Be Exacerbated

By putting additional downward pressure on prices and contributing to additional premature retirements, allowing “fuel security” resources to participate as price-takers has the potential to *exacerbate* fuel security concerns. In that regard, it is important to note that pervasive suppression of prices in the ISO-NE capacity market and the growing fuel security concerns that ISO-NE is facing are inextricably linked. ISO-NE has stated that “[c]urrent trends are pushing the New England power system on a path toward greater fuel-security risks. These trends include the increasing retirements of power plants with fuel stored onsite (nuclear, coal and oil).” ISO-NE Fuel-Security Analysis at 53. In addition, “the region’s older oil, coal, and nuclear generators with fuel on-site, which are critical to reliability when natural gas is not available, are becoming *less economically competitive* and may seek to retire before the region has addressed the fuel-delivery constraints, or added sufficient alternative resources to replace them.” ISO-NE Resilience Response at 34 (emphasis added). Indeed, when ISO-NE studied various scenarios that jeopardize fuel security, it found that “[t]he retirements of oil- and coal-fired plants have the *greatest impact* among the five variables [studied by ISO-NE] on increasing the region’s fuel-security risk.” ISO-NE Fuel-Security Analysis at 48 (emphasis added).

The retirement situation already is dire (as demonstrated by Mystic 8 & 9’s intention to retire; Mystic 8 & 9 are not old resources). “In 2012, ... [ISO-NE] identified about 8,300

megawatts (MW) of coal- and oil-fired generators at risk of retirement due to age and *economic headwinds*.¹⁵ Between 2013 and 2019, nearly 3,000 MW of coal- and oil-fired generation have retired or will retire, leaving about 5,400 MW available but at risk of retirement.” ISO-NE Fuel-Security Analysis at 12 (emphasis added). But, in ISO-NE’s analysis, “[t]he unfavorable single-variable scenario that increased coal- and oil-fired power plant retirements [from 1,500 MW] to 4,500 MW had the *worst outcomes*” for fuel security. *Id.* at 40 (emphasis added). Nuclear units also are retiring, Vermont Yankee (approximately 500 MW) in 2017, and Pilgrim (approximately 600 MW) in 2019.

Price suppression not only will lead to premature retirements, but also could deter the entry of the new resources ISO-NE needs to replace retiring resources that currently provide fuel security. *See* ISO-NE Fuel-Security Analysis at 35 (assuming 4,400 MW of new renewable resources by 2024 as a base case for maintaining fuel security).

In short, the last thing anyone should propose to remedy resilience concerns in New England would be to further suppress capacity prices and displace otherwise economic existing resources. Yet that is precisely what ISO-NE has proposed and could happen here without Commission intercession.

II. FUEL SECURITY CAPACITY MUST BE APPROPRIATELY PRICED

A. A CASPR-like Solution Is Available and Implementable

The imminent threat to FCA 13, FCA 14 and potentially subsequent auctions is real but fully avoidable. The capacity from fuel-security resources must participate in the

¹⁵ This amount actually excludes LNG-fired Mystic Units 8 & 9.

capacity auctions at some level that reflects its actual marginal costs. And, of course, reliability must be retained. These objectives are in no way mutually exclusive.

After considering several potential alternatives, we propose a CASPR-like approach that uses the existing Annual Reconfiguration Auctions (ARA) as a type of substitution auction for the capacity of resources held for fuel security. In summary:

The NEPGA proposal has two complementary components. The first piece is to insert the above-market cost resources being held for fuel security into the FCM at its actual cost rather than as a price-taker. This has the effect of preserving the competitive outcomes in the FCA. The second component is to offer the above market cost, fuel secure resource being held for reliability into three Annual Reconfiguration Auctions (“ARA”) as a price-taker which would allow the above market cost resource to obtain a CSO.

Sotkiewicz Aff. at ¶ 29.

More specifically, the resource that is needed for fuel security—Mystic 8 & 9 in the case of FCA 13 and FCA 14—will be offered into the Forward Capacity Auction at its retirement de-list bid price (subject to normal mitigation rules).¹⁶ If its retirement de-list bid exceeds the final FCA clearing price, the resource needed for fuel security will nevertheless be held by ISO-NE and retain its capacity and energy interconnection rights. Its capacity will be qualified to offer as supply in the ARAs as a price-taker, guaranteeing that it clears and is committed as capacity. One-third of the quantity of the capacity of the resource held for fuel security will be entered into each of the three ARAs. The capacity will be spread over the three ARAs to diminish any concerns that may arise over incentives for resources in the Forward Capacity Auction to offer below their true costs to obtain a Capacity Supply Obligation in an ARA. With decreased quantity in any ARA, spreading it over several ARAs

¹⁶ ISO-NE has indicated that only resources that have submitted a Retirement De-List Bid may be eligible to be held for fuel security.

increases the likelihood that changes in the MRI demand curves and other resource circumstances will make it difficult for any strategic sales of this type. Further, the MRI demand curve used in the ARA itself mitigates such risk.

The fuel security resource will have a cost-of-service contract for its fuel security service and will be agnostic about prices in the ARAs. *See* ISO-NE CASPR Filing at 5-6 (describing the mechanics of the similar CASPR mechanism); *see also* New England Power Generators Association, “Annual Reconfiguration Auction Approach Design” (May 23, 2018) (Exhibit 2, hereto) (“NEPGA ARA Proposal”) (detailing proposed ARA approach and proposed tariff changes).

The Commission should approve this approach as a just and reasonable and not unduly discriminatory replacement rate under FPA section 206. There are many benefits to this approach:

(1) The resource needed for fuel security remains available to address fuel security needs, and thus addresses ISO-NE’s reliability needs.

(2) The capacity from the resource needed for its fuel security service is offered at its actual retirement de-list price (as mitigated) in the Forward Capacity Auction—thereby avoiding all price suppression in the FCA and allowing the FCA to more closely reflect market fundamentals and not distort exit and entry decisions. Just as ISO-NE did with CASPR, NEPGA “favored this objective ‘because FCM’s capacity clearing price guides competitive entry and exit decisions for the region,’ and therefore ‘is essential to achieving the region’s resource adequacy over the long term.’” CASPR Order at P 72, *quoting* ISO-NE CASPR Filing at 5. Most of the critical market signals will continue to be sent in the Forward Capacity Auction, and the ARA will retain its secondary role. *See* CASPR Order at P 75.

(3) In contrast to the application of a MOPR or price floor, which could have the effect of preventing the Mystic Units from obtaining a Capacity Supply Obligation, NEPGA's proposal will ensure consumers that a resource retained for fuel security service will be able to obtain a Capacity Supply Obligation and associated market revenues to offset charges for fuel security service under the cost-of-service agreement. Specifically, the capacity from the resource needed for fuel security is offered at zero and cleared in the ARAs, ensuring that the held resource's capacity is counted as a capacity resource but mitigating concerns that such capacity be paid for twice. *See* CASPR Order at P 24 (identifying double payment of capacity as a risk, later remedied by CASPR).

(4) Any revenues recovered by the resource in the ARA clearing prices will offset revenues in its cost-of-service agreement. The out-of-market payment thus is limited to the amount above what the market provides.

(5) Entering Mystic's megawatts as price-takers into an ARA will create incentives for other suppliers to trade out of their obligations in that same ARA, much like CASPR ensures that there is no oversupply. To the extent there is not full substitution in the ARA, then load gains a reliability benefit whose dollar value is quantified by the MRI-based demand curve, against which Mystic (or other resources held for fuel security) will clear.

(6) Unlike CASPR, there is no need for an offsetting retirement because there is no new entry to offset and supply clears against the MRI demand curve in the ARA. *See* Sotkiewicz Aff. at ¶ 31.

(7) This is a market-based approach. It is possible that FCA prices may rise when Mystic 8 & 9's retirement de-list offer is taken into account in clearing the auction. This depends upon market dynamics, including potential new entry, other retirements and a host

of other factors. But if prices rise when the largest resource in Boston retires, that should surprise no one. That is exactly how the market is supposed to work. Similarly, if prices remain low because there is a lot of new entry into the market (by unsubsidized resources), that is also how markets work. After all of the work the Commission has done to authorize this market design, it would be arbitrary and capricious to prevent the market rate from sending market signals that take into account Mystic 8 & 9's intention to retire. Let the markets work.

In sum, NEPGA's ARA-approach to resources held for fuel security is "a market-based approach that will accommodate [a resource held for fuel security] while more effectively preventing it from depressing capacity market prices." See ISO-NE CASPR Filing at 11 (advocating for CASPR on these grounds); see also Sotkiewicz Aff. at ¶ 34 (stating that NEPGA's proposal "preserves both competitive markets and reliability, promotes the orderly entry and exit of resources, and avoids the 'death spiral' of continual declines in prices and inefficient displacement of resources that could harm reliability."). Reliability is maintained without suppressing capacity prices and further jeopardizing resilience and fuel security in New England. It is just and reasonable and should be approved.

B. The Commission Must Take Action Now

Perhaps the most critical benefit of NEPGA's proposed ARA approach to pricing resources held for fuel security is that it can be implemented *now*. ISO-NE, market participants and stakeholders, and the Commission itself all are fully familiar with the CASPR-based concepts in our proposal and with the existing ARA mechanism. Necessary tariff changes are discrete and ISO-NE software changes should be minimal. See NEPGA ARA

Approach, *passim*. The issues and remedies are substantially similar, and there is no need to reinvent the wheel.

ISO-NE may warn that this relief cannot be implemented in time for FCA 13 or prefer no immediate action while a long-term solution is studied and worked out. That is false. There is nothing new to set up under our ARA approach as the ARA will run regardless. All that is required is the administrative step to designate Mystic 8 & 9's bids in the Forward Capacity Auction to be equal to the Independent Market Monitor-approved bid price, instead of \$0, and to waive the manual administrative step of retiring Mystic's interconnection rights if they do not receive a Capacity Supply Obligation at the approved bid.

Regardless, there is no choice but to take action now. The alternative is to force an unjust and unreasonable and unduly discriminatory rate upon existing generators, causing all of the damages outlined in this complaint. For this reason, NEPGA has protested ISO-NE's waiver request, arguing that the waiver should only be granted if the price suppression effects in the Forward Capacity Auction are immediately remedied. *Every auction matters*. Neither ISO-NE nor the Commission can predict exactly how much distortion approximately 1,400 MW of zero-priced capacity—almost 6% of the capacity in New England—could cause for investment decisions and resilience in the next auction. But Dr. Sotkiewicz estimates potentially 1050 MW-1285 MW of displaced economic capacity in FCA 13 alone. Sotkiewicz Aff. at ¶¶ 15-16. By any estimate, the impact will be severe.

To be clear, NEPGA is not wedded to our ARA-based solution as the only means to address the mechanics of providing the Mystic Units with a Capacity Supply Obligation (or its equivalent), so long as their presence does not suppress prices in FCA 13 or FCA 14. The perfect should not be the enemy of the good. But our proposal relies upon an existing auction

mechanism (the ARA), requires minimal other administrative changes and is fully implementable in time for the next auction.

ISO-NE should also continue to work towards a long-term solution—modeling fuel security constraints in the auction, or a market-based solution decoupled from the capacity market (*see* ISO-NE Waiver Petition at 24)—but just and reasonable rates in the Forward Capacity Auction cannot be set aside while that work goes on. The Federal Power Act squarely prohibits any such course of conduct.

III. PRECEDENT SUPPORTS RELIEF IN FCA 13 AND FCA 14

The relief NEPGA seeks is fully consistent with Commission precedent. Contrary decisions where the Commission has permitted price suppression in the past are inapplicable, distinguishable, or have been superseded by more recent Commission orders.

A. Nothing Requires Price Suppression in These Circumstances

We begin by disproving the negatives. There is *nothing* in law, precedent or policy that *requires* a generator needed for fuel security with an out-of-market payment to be offered in at zero in the Forward Capacity Auction.

First, there is no Commission precedent directly on point for how to treat resources held for fuel security with an out-of-market contract in a forward capacity auction.

Second, ISO-NE's tariff likewise does not address fuel security. This is why ISO-NE has filed for Commission approval of various waivers of its tariff to allow it to hold Mystic 8 & 9 for fuel security. Combined with these waivers is ISO-NE's *assumption* that Mystic 8 & 9 will be priced like resources held for local reliability—as a price-taker in the capacity auction. *See* ISO-NE Waiver Petition at 26. But nothing *requires* that outcome as the tariff does not contemplate “fuel security” at all.

Nor is there any obvious rationale for treating resources held for system-wide fuel security in the same way as resources held for local transmission reliability as ISO-NE has proposed. Local transmission reliability issues typically arise when there is a localized transmission constraint or voltage issue where a portion of the system-wide requirement must be met locally. Fuel security, on the other hand, is a system-wide issue of no fixed definition but that in New England is primarily about retaining resources with fuel stored on site. NEPGA disputes that resources held for local transmission reliability should be allowed to suppress capacity prices, but this complaint is limited to the issue at hand. Regardless, there can be no colorable dispute that treating resources needed for system-wide security in the same way as localized transmission reliability issues would—by suppressing capacity prices—actually exacerbate premature retirements and therefore fuel security (as set forth above).

Third, and perhaps most important, it is a *false choice* to suggest that the Commission must either ensure fuel security or permit price suppression in FCA 13 and FCA 14. ISO-NE presents the issue as a choice where “the Commission must weigh potential negative market consequences for some market participants [*i.e.*, price suppression] against the potential that the ISO may be unable to meet demand in New England during the winters of 2022-23 and 2023-24” (*i.e.*, reliability). ISO-NE Waiver Petition at 35. No such choice is necessary or even logical. It is simple enough for the Commission to ensure fuel security *without* suppressing prices, and NEPGA proposed just one potential approach above.

It is true that the Commission often weighs different policy objectives in determining whether to permit price suppression in the capacity market. But here again it is appropriate to revisit the law and logic underlying the CASPR Order. There, ISO-NE and the Commission

weighed potential price suppression against the accommodation of state choices. Faced with that choice, ISO-NE

avored the preservation of competitively-based capacity pricing ... because [Forward Capacity Market]’s capacity clearing price guides competitive entry and exit decisions for the region, is essential to achieving the region’s resource adequacy over the long term, and is the basis for billions of dollars in payments to more than 30 GW of capacity resources each year – a sum that determines [Forward Capacity Market]’s cost to consumers.

ISO-NE CASPR Filing at 5 (emphasis added). In approving CASPR, the Commission agreed.

Here there is no similar policy choice (between price suppression and fuel security or reliability) because price suppression in the capacity market will exacerbate fuel security concerns and it is entirely possible to ensure the continued availability of the Mystic Units to ISO-NE for the subject years without forcing their capacity into the primary Forward Capacity Auction and suppressing prices.

B. Precedent Against Price Suppression Applies Here

While the Commission has not previously considered the narrow issue of whether to allow capacity market price suppression by a resource held for fuel security with an out-of-market cost-of-service contract, there is a wide body of price suppression case law. Many of these cases have arisen in the context of state-sponsored subsidies for new resources of various configurations. In those cases, the Commission and the courts have vigorously defended the principle that the FPA both authorizes and requires the Commission to prevent generation resources receiving out-of-market payments from artificially suppressing wholesale capacity prices. *See New England Power Generators Ass’n v. FERC*, 757 F.3d 283 at 290 (D.C. Cir. 2014) (“NEPGA”) (citing *Conn. Dep’t of Pub. Util. Control v. FERC*, 569 F.3d 477 at 481-83 (D.C. Cir. 2009)); *N.J. Bd. of Pub. Utils. v. FERC*, 744 F.3d 74 at 97-98 (3rd Cir. 2014) (same); *id.* at 100-101 (quoting *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 at PP 142-43

(2011), *reh'g denied*, 137 FERC ¶ 61,145 at PP 3, 96 (2011)); *NESCOE*, 142 FERC ¶ 61,108 at PP 34-35 (2013). This is because “all uneconomic entry has the effect of depressing prices below the competitive level.” *N.Y. Indep. Sys. Operator, Inc.*, 124 FERC ¶ 61,301 at P 29 (2008); see *PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,157 at PP 87, 90. In *NEPGA*, the D.C. Circuit noted “FERC specifically found that ‘[out-of-market] capacity suppresses prices regardless of intent.’” 757 F.3d at 292 (quoting *ISO New England Inc.*, 135 FERC ¶61,029 at P 170 (2011)).¹⁷

The same is true here. While no state subsidies for new entry are in play, the resource ISO-NE holds for fuel security will receive an out-of-market cost-of-service contract for system-wide fuel security and its zero-priced offer in the capacity auction would assuredly suppress capacity prices regardless of intent. Permitting uneconomic resources held for system wide fuel security in this manner into the capacity market is another form of “definitional market distortion in favor of buyers” even if no one, including ISO-NE, has any desire to suppress capacity prices. *NEPGA*, 757 F.3d at 294. This is what “regardless of intent” means.

Dr. Sotkiewicz also highlights that the price suppression effects occur regardless how the out-of-market resource obtains its revenues.

To be very clear, there is no attempt to exercise buyer-side market power through the retention of Mystic Units 8 and 9 and inserting them into the FCA as price-takers. However, the action of inserting any “out-of-market” cost resource into the FCA as a price-taker is observationally equivalent to an

¹⁷ The ISO-NE External Market Monitor has observed that state-subsidization of generation resources, like uneconomic retention, undermines “the ability of the [Forward Capacity Market] to facilitate efficient long-term decisions by market participants who rely on wholesale market revenues when deciding whether to invest in new generation . . . [or] make capital improvements to existing units.” Potomac Economics, *2016 Assessment of the ISO New England Electricity Markets* at 24 (June 2017), available at <https://www.potomaceconomics.com/wp-content/uploads/2017/07/ISO-NE-2016-SOM-Report-Full-Report-Final.pdf>.

exercise of buyer-side market power in terms of artificial price suppression and inefficient displacement of otherwise economic resources as shown above.

Sotkiewicz Aff. at ¶ 64.

C. There Should Be No Exception for Price Suppression in the Name of Fuel Security

Notwithstanding the ample evidence that treating Mystic and other fuel security resources as price-takers will harm suppliers by suppressing prices, there will no doubt be those that argue that the Commission should ignore these concerns on the basis that this case involves the capacity of a resource receiving compensation under a cost-of-service agreement for fuel security rather than state subsidized resources or other forms of uneconomic entry. The Commission should reject these arguments.

1. There Is Mounting Evidence of the Risks of Price Suppression

Even if past efforts by the Commission to combat price suppression largely have focused on the dangers of uneconomic entry, it has become clear that existing approaches to protecting against the potential for price suppression are insufficient to maintain the integrity of FERC-jurisdictional capacity markets. In its filing proposing implementation of CASPR, ISO-NE recognized that there was “mounting evidence of risk” that price suppression associated with the participation of state-subsidized resources threatened to undermine operation of the Forward Capacity Market and proposed a solution to help accommodate state public policies in a way that does not distort wholesale markets. CASPR Filing at 12. Similarly, when approving the CASPR proposal, the Commission acknowledged that it would consider novel solutions and approaches to addressing the threat of price suppression where necessary to ensure just and reasonable rates. CASPR Order at P 22. Just as ISO-NE and the Commission recognized that the growing threat of price suppression required a new

approach to accommodating the participation of state-subsidized resources in the CASPR proceeding, the Commission should take steps to protect the operation of its markets against price suppression associated with the retention of resources needed for fuel security and grant this complaint.

In reality, price suppression associated with the participation of resources receiving out-of-market payments for fuel security would be equally disruptive to the ability of a capacity market to achieve its long-term objectives as price suppression associated with uneconomic state-sponsored entry. As FERC has recognized, “[a] capacity market will not be able to produce the needed investment to serve load and reliability if a subset of suppliers is allowed to bid non-competitively to suppress market clearing prices.” *PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,157 at P 90. This is true whether the resources at issue are being retained to maintain fuel security or being developed pursuant to a state solicitation process. In fact, as Dr. Sotkiewicz observes, the effect of submitting price-taker offers for resources retained for fuel security are “observationally equivalent to an exercise of buyer-side market power in terms of artificial price suppression and inefficient displacement of otherwise economic resources.” Dr. Sotkiewicz at ¶ 64.

2. *RMR Agreements Distort Markets*

None of this should be news. With respect to RMR agreements in particular, the Commission has repeatedly recognized that RMR agreements distort market outcomes and impede efficient market entry and exit. *Devon Power LLC*, 103 FERC ¶ 61,082 at P 29 (2003) (“RMR contracts suppress market-clearing prices, increase uplift payments, and make it difficult for new generators to profitably enter the market.”); *Bridgeport Energy, LLC*, 118 FERC ¶ 61,243 at P 41 (2007) (explaining that “RMR agreements suppress market-clearing

prices and deter investment in new generation ... broadly hinders market development and performance ... [and] should be used as a last resort”). In fact, the Forward Capacity Market was developed after the Commission found that the existing resource adequacy program was unjust and unreasonable because it was leading to routine reliance on RMR agreements. *Devon Power, LLC*, 115 FERC ¶ 61,340 at P 203 (2006) (explaining that the Commission had directed changes to ISO-NE’s resource adequacy construct because “RMR agreements, and the need for such agreements, caused an extensive disruption to wholesale markets”).

In its waiver petition, ISO-NE states that it “appreciates that an RMR agreement, by allowing a generation facility to recover its costs regardless of the market price for capacity, *raises the potential for market distortions.*” ISO-NE Waiver Petition at 33 (emphasis added). By replacing a priced retirement bid with a zero-price offer, it is more like a “certainty” than a “potential.”

3. IPPNY v. NYISO *Should Not Be Applied Here*

Some likely will argue that the Commission’s decision in *Indep. Power Producers of N.Y., Inc. v. N.Y. Indep. Sys. Operator, Inc.* 150 FERC ¶ 61,214 (2015) (“*IPPNY*”) provides a basis for denying NEPGA’s complaint. In that case, the Commission denied the Independent Power Producers of New York’s complaint seeking a determination that certain resources subject to RMR agreements should be excluded from the capacity market or be subject to an offer floor. We disagree. The Commission’s determination in that case should not be viewed as controlling the outcome here for a number of reasons.

First, while the Commission’s decision in *IPPNY* was based on its understanding that the agreements at issue were intended to address a “short-term reliability” issue, there is no basis for finding that the issues necessitating a cost-of-service agreement with Mystic are

short-term in nature. To the contrary, ISO-NE acknowledges that the fuel security issues driving the need for the Mystic cost-of-service agreement are part of a “growing threat to the reliable operation of the New England electric system” and that it is seeking to ensure continued operation of the Mystic 8 & 9 through May 31, 2024. ISO-NE Waiver Petition at 2. The Mystic cost-of-service agreement itself is a two-year agreement, and ISO-NE is in the process of developing Tariff language defining the criteria for holding a resource for fuel security, for effect through FCA 15. In that respect, the Mystic cost-of-service agreement is more akin to the type of long-term agreement that the Commission expressed concern about in *IPPNY*. *IPPNY* at PP 69-71 (directing NYISO to further consider whether long-term repowering agreement could have the effect of artificially suppressing capacity market prices).

In addition, since ISO-NE employs a three-year forward capacity market—unlike NYISO’s short-term Installed Capacity market—allowing resources retained to address fuel security issues to participate in the Forward Capacity Market as price-takers will have the effect of suppressing prices received for supplying capacity multiple years into the future. At a minimum, allowing the Mystic Units to offer into FCA 13 and FCA 14 would have the effect of suppressing prices received for supplying capacity up to six years after the execution of the RMR agreement. Moreover, in the likely event that other resources seek similar treatment, a decision by the Commission to permit resources retained to address fuel security concerns to participate in the Forward Capacity Auction as a price-taker could have profound implications for the long-term ability of the Forward Capacity Market to attract investment in the resources necessary to maintain reliability.

Second, there is compelling evidence that granting this complaint is necessary to prevent the retention of the Mystic Units from adversely affecting the ISO-NE markets. One of the primary justifications that the Commission offered in support of denying IPPNY's complaint was that IPPNY had failed to demonstrate that allowing the resources at issue to offer into the capacity market at a *de minimis* level would harm the NYISO markets. *IPPNY* at P 65. NEPGA disputes the notion that there was insufficient evidence to support IPPNY's request for relief in that case and notes that, since the Commission's decision, both NYISO and the NYISO Market Monitoring Unit have expressed concern that the uneconomic retention of generation units may be undermining the efficient and competitive functioning of the NYISO markets. *See, e.g.*, "Response to Information Request," Attachment II, (Docket No. EL13-62-000) (filed Dec. 16, 2015) at 1 (noting that NYISO had concluded that "there may be concerns surrounding the ability and incentive to exercise market power through uneconomic retention and repowering"); "Comments of the New York ISO's Market Monitoring Unit," (Docket No. EL13-62-002) (filed Jan. 11, 2016) at 5 (stating that it "would be difficult to ensure that the market will perform competitively ... without clear rules to mitigate buyer-side market power, which includes uneconomic retention").

Putting that issue aside, however, there is evidence in this proceeding that action is necessary to prevent the retention of the Mystic Units from further undermining the ability of the ISO-NE capacity markets to achieve its objectives. This includes \$214 to \$642 million in artificial price suppression in FCA 13 alone and distorted market signals that likely will lead to premature retirements and deterred new entry, further jeopardizing fuel security.

Third, ISO-NE is seeking to retain the Mystic Units for a reason that is distinct from resource adequacy, unlike the agreements in *IPPNY*. Notably, in *IPPNY*, the Commission

agreed with NYISO and the NYISO MMU that requiring the units at issue to submit offers into the NYISO ICAP market at a *de minimis* level was justified by the fact that, if the transmission issues addressed by these units were appropriately modeled in the ICAP market, the units would both clear the market; accordingly, the Commission found that it was just and reasonable for those units to be bid into the market in a manner that would ensure that they would clear. In this case, however, the Mystic Units are not being retained to maintain resource adequacy, but to address a “fuel security” need that has not yet been defined and that was never intended to be reflected in the capacity requirement or demand curves in the ISO-NE Forward Capacity Market. Thus, in contrast to *IPPNY*, allowing the Mystic Units to participate in the Forward Capacity Auctions as price-takers cannot be viewed as an administrative substitute for what would have happened if the ISO-NE Forward Capacity Market had been modeled in a manner that appropriately modeled applicable constraints.

Fourth, we have proposed a mechanism that will permit the resource needed for fuel security to retain its cost-of-service agreement *and* participate in the markets. Unlike in other cases where the Commission has approved RMR agreements, there is no need to sacrifice sound price formation principles in this case to maintain reliability. No such choice between price suppression and reliability is necessary. *See supra* at 26.

Finally, to the extent that the Commission believes that *IPPNY* requires that the Commission deny the complaint in this proceeding, the Commission should grant rehearing of its order in *IPPNY* and issue orders in both proceedings that are consistent with the Commission’s statutory obligations and ensures just and reasonable rates. To the extent that *IPPNY* stands for the proposition that it is just and reasonable to allow resources receiving out-of-market payments pursuant to an RMR agreement to artificially suppress prices, the

Commission's decision in *IPPNY* is inconsistent with Commission precedent recognizing the adverse effects of such agreements and the statutory duty of the Commission to prevent resources receiving out-of-market prices from suppressing prices below just and reasonable levels.

In sum, given mounting evidence of the dangers of price suppression, there is no justification for the Commission to allow a generator with an out-of-market contract for fuel security to suppress capacity prices. As the courts have recognized, the Commission has a statutory obligation to prevent resources from depressing capacity prices below a just and reasonable level. *NEPGA* at 295; *see also* CASPR Order at P 21. That duty applies regardless whether the price suppression at issue is the result of uneconomic entry or cost-of-service agreements for fuel security.

D. Past Justifications for Allowing Price Suppression Do Not Apply

Some will also likely point to past orders where the Commission has approved proposals to allow resources receiving out-of-market payments to participate in the Forward Capacity Market—including, specifically, the Renewable Technology Resource exemption—over concerns about price suppression. These prior orders provide no basis for allowing Mystic to participate in the market as a price-taker or otherwise denying the complaint.

We begin by dispelling concerns regarding the potential that consumers will be required to pay twice for “redundant capacity.” This does not warrant allowing Mystic to participate in the Forward Capacity Auction as a price-taker. For instance, while FERC previously justified its decision to approve the Renewable Technology Resource exemption from the MOPR on the basis that it was required to protect consumers from paying for

redundant capacity through the Forward Capacity Market, these concerns do not provide a basis for denying the complaint here. Notably, the courts have repeatedly rejected arguments that concerns regarding the potential that consumers will be required to pay for “redundant capacity” somehow justify the Commission departing from its duty to ensure just and reasonable rates and allowing resources receiving out-of-market compensation to distort market outcomes. *See N.J. Board of Pub. Utils. v. Fed. Energy Reg. Comm’n*, 744 F.3d at 97; *NEPGA*, 757 F.3d at 294. Moreover, in this case, the objectives of ensuring just and reasonable auction prices and protecting consumers from paying for redundant capacity are not mutually exclusive. To the contrary, implementation of NEPGA’s proposal will ensure that Mystic’s participation in FCA 13 and FCA 14 does not further suppress the prices received by other resources while protecting any possibility that consumers would be required to pay for redundant capacity.

In addition, none of the other rationales that the Commission relied upon in approving the Renewable Technology Resource exemption support allowing resources retained for fuel security to further suppress capacity market prices by participating in the capacity markets as a price-taker:

- ISO-NE’s proposal would result in a significant quantity of capacity being offered into the Forward Capacity Auction as a price-taker. The Commission previously found that capping the Renewable Technology Resource exemption at 200 MW per year would limit the exemption’s price suppressive effects based largely on the Commission accepting ISO-NE’s expectation that load would grow by approximately 200 MW per year. *ISO New England*, 155 FERC ¶ 61,023 at P 28. Allowing Mystic 8 & 9 to participate in the Forward Capacity Auction as price-takers, in contrast, would result in an additional 1,400 MW—more than *seven times* the amount of capacity subject to the Renewable Technology Resource exemption on an annual basis—being offered into the market at \$0 with ISO-NE predicting flat to declining load growth for the foreseeable future.

- There is no basis for finding that load growth will offset any suppressive effects of allowing the Mystic Units to offer into the Forward Capacity Auction as a price-taker. To the contrary, ISO-NE recently has acknowledged that load growth within the region has fallen short of expectations and has been insufficient to prevent price suppression associated with the Renewable Technology Resource exemption. CASPR Filing at 11. If load growth within ISO-NE has been insufficient to prevent exempting 200 MW of renewable resources from the MOPR on an annual basis from suppressing capacity prices, there is simply no logical basis for concluding that load growth could offset the price suppressive effects of offering the 1,400 MW associated with the Mystic Units on an annual basis.
- ISO-NE's use of a sloped demand curve will not prevent price suppression. NEPGA does not dispute that the price suppression associated with the submission of \$0 offers is less severe with use of a sloped demand curve than a vertical demand curve. So too is getting stabbed in the stomach less severe than getting stabbed in the heart. That does not change the fact, however, that allowing the Mystic Units to participate in Forward Capacity Auctions as a price-taker will significantly distort and suppress prices below competitive levels.

IV. REQUEST FOR FAST TRACK PROCESSING

This Complaint warrants fast track processing under Rule 206(b)(1) of the Commission's Rules of Practice and Procedure. 18 C.F.R. § 385.206(b)(1). As explained above, immediate action is necessary to implement a solution that ensures that the participation of the Mystic Units in FCA 13 and subsequent Forward Capacity Auctions does not distort market clearing prices and impair the efficient functioning of the Forward Capacity Market. Granting this Complaint on an expedited basis will provide certainty to market participants that are actively preparing for participation in FCA 13 regarding the rules that apply and that the participation of the Mystic Units in the upcoming capacity auction will not distort market prices. We therefore respectfully request a Commission ruling on this complaint by July 2, 2018, the date on which ISO-NE has requested action on its waiver request.

V. *COMPLIANCE WITH RULE 206 REQUIREMENTS*

A. *Rule 206(b)(1): Action or Inaction Alleged to Violate Statutory Standards or Regulatory Requirements*

NEPGA alleges that allowing the Mystic Units to participate in the Forward Capacity Auction as a price-taker is unjust and unreasonable and unduly discriminatory or preferential for the reasons discussed in sections I-III of the foregoing complaint.

B. *Rule 206(b)(2): Legal Bases for Complaint*

The legal bases for NEPGA's complaint are set forth above in sections I-III of the complaint.

C. *Rule 206(b)(3) and 206(b)(4): Issues Presented as They Relate to the Complainant and Quantification of Financial Impact on Complainant*

As noted above, NEPGA's member companies represent 26,000 MWs of electrical generating capacity throughout the New England region. As detailed in section I.A.1 of the complaint and Exhibit 1, NEPGA estimates that participation of the Mystic Units as price-takers in the upcoming Forward Capacity Auction will decrease the revenues received by NEPGA and other generators within New England by \$214 to \$642 million in FCA 13 alone.

D. *Rule 206(b)(5): Nonfinancial Impacts on Complainant*

As detailed in sections I-III of the complaint, treating the Mystic Units and other generation resources retained to maintain fuel security as price-takers in Forward Capacity Auctions will artificially suppress prices, lead to additional premature retirements and cost-of-service agreements, and exacerbate existing fuel security concerns in the ISO-NE market.

E. *Rule 206(b)(6): Related Proceedings*

As noted above, ISO-NE has filed a petition for waiver of its tariff in Docket No. ER18-1509-000 to permit ISO-NE to retain Mystic 8 & 9 for fuel security concerns in the ISO-NE

region. NEPGA is filing a conditional protest of ISO-NE's waiver petition. In addition, on May 16, 2018, Constellation Mystic Power, LLC filed a proposed cost-of-service agreement providing for the continued operation of Mystic Units 8 and 9 in Docket No. ER18-1639-000.

F. Rule 206(b)(7): Specific Relief Requested

The specific relief requested is set forth in section II of the foregoing complaint.

G. Rule 206(b)(8) Documents that Support the Complaint

Attached are the following exhibits:

Exhibit 1: Affidavit of Dr. Paul Sotkiewicz, former Chief Economist at the PJM Interconnection, LLC, Director of Energy Studies at the Public Utility Research Center, University of Florida, and Economist at the Commission.

Exhibit 2: Overview of NEPGA Annual Reconfiguration Auction Proposal.

H. Rule 206(b)(9): Dispute Resolution

Prior to filing, Complainants engaged in good faith negotiations with ISO-NE in an attempt to resolve the issues outlined in the foregoing Complaint. Despite those discussions, the parties have been unable to reach a resolution. Complainants do not believe ADR under the Commission's supervision would successfully resolve the complaint.

I. Rule 206(b)(10): Form of Notice

The form of notice required by the Commission's Rule 206(b)(10) is attached as Exhibit 3.

J. Rule 206(c): Service on Respondent

Pursuant to Rule 206(c), concurrent with its filing with the Commission, NEPGA has served copies of this Complaint by email and U.S. mail on the contacts for ISO-NE as listed on the Commission's list of Corporate Officials:

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Telephone: 413-540-4592
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CONCLUSION

For the foregoing reasons, NEPGA requests that the Commission grant the relief requested by this complaint.

Respectfully submitted,

Dan Dolan
President
NEW ENGLAND POWER GENERATORS
ASSOCIATION
33 Broad St., 7th Floor
Boston, MA 02109
(617) 516-5355

/s/ Paul F. Wight
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Vice President
Market & Regulatory Affairs
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Exhibit 1

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

New England Power Generators Association,)	
)	
)	
Complainant)	
)	Docket No. EL18-_____-000
v.)	
)	
ISO New England Inc.)	
)	
Respondent.)	

AFFIDAVIT OF PAUL M. SOTKIEWICZ, PH.D.

I. QUALIFICATIONS

1. My name is Dr. Paul M. Sotkiewicz. I am the President and Founder of E-Cubed Policy Associates, LLC (“E-Cubed”) and formerly served as the Chief Economist in the Market Service Division of PJM Interconnection, L.L.C. (“PJM”). I have been asked by the New England Power Generators Association, Inc. (“NEPGA”) to submit this affidavit in support of the Section 206 complaint filed by NEPGA in Docket No. EL18-____-000 on May 23, 2018.
2. I have over 20 years of experience on matters at the intersection of utility regulatory policy, power system economics, and environmental economics to provide analysis. In my current role, I advise private and public-sector clients on a range of economic issues related to electricity market design and performance, power generation economics, utility regulatory policy, and the economic impacts of state and federal environmental policies.
3. Prior to founding E-Cubed, I served as a Senior Economic Policy Advisor and as the Chief Economist in the Market Service Division of PJM. In those roles, I provided expert

analysis, advice, and support for PJM initiatives related to market design changes in, and performance of, PJM's energy, ancillary service, and capacity markets. Before joining PJM, I served as the Director of Energy Studies at the Public Utility Research Center, University of Florida, and as an Economist at the Federal Energy Regulatory Commission. I have a B.A. in History and Economics from the University of Florida, and an M.A. and Ph.D. in Economics from the University of Minnesota.

II. INTRODUCTION AND PURPOSE OF AFFIDAVIT

4. As a former PJM Chief Economist, I was involved in helping PJM develop various iterations of the Minimum Offer Pricing Rule ("MOPR") as filed at, and approved by, the Commission. Additionally, I was responsible for the administration of the unit specific MOPR exemption process at PJM, and I also oversaw the application of the Competitive Entry and Self-Supply Exemptions in the previous version of the MOPR that was later vacated in *NRG*.¹ I have seen the potential harm that can be done by below cost offers in a capacity market that has many of the same features as the ISO-NE Forward Capacity Market ("FCM").
5. I am submitting this affidavit in support of NEPGA's complaint and to show the impact of treating Mystic Units 8 and 9 as a price taker on the ISO-NE markets as well as NEPGA's proposed alternative to accommodating the participation of the Mystic units. As discussed further below: 1) treating Mystic and other resources retained for fuel security as price takers will do significant harm to the competitiveness of the FCM market

¹For the MOPR in place for the 2011 and 2012 BRA, *see PJM Interconnection, L.L.C.*, 153 FERC ¶ 61,022 (2011) ("April 2011 MOPR Order). For the MOPR in place from 2013 to 2017 until vacatur *see PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090, (2013) ("May 2013 MOPR Order"), *reh'g denied*, 153 FERC ¶ 61,066 (2015) ("October 2015 MOPR Order"), *vacated & remanded sub nom. NRG Power Mktg., LLC v. FERC*, 862 F.3d 108 (D.C. Cir. 2017), *reh'g denied*, 2017 U.S. App LEXIS 18218 (D.C. Cir. Sept. 20, 2017).

and is inconsistent with the first principles of capacity markets articulated by the Commission; 2) the proposal to insert an above market cost resource into the FCM as a price taker does exactly the same harm as an exercise of buyer-side market power, which the Commission has found to be unjust, unreasonable, and unduly discriminatory; and 3) the proposed remedy offered by NEPGA does not distort the results of the Forward Capacity Auction, results in competitive pricing outcomes in FCA, does not displace otherwise economic resources, and provides better reliability outcomes for ISO-NE load than the current ISO-NE proposal.

III. INSERTING THE ABOVE-MARKET COST MYSTIC UNITS INTO FCA 13 AND FCA 14 AS PRICE TAKERS WILL CAUSE SIGNIFICANT HARM TO THE MARKET AND ERODE RELIABILITY

6. ISO-NE in its tariff waiver proposes to retain Mystic Units 8 and 9 with a net capacity value in the FCM of approximately 1400 MW in service in order to maintain fuel security during the winter because of its availability of on-site fuel resources in the form of liquefied natural gas (“LNG”). As a part of its tariff waiver, ISO-NE proposes to offer Mystic Units 8 and 9 into FCA 13 and FCA 14 for the 2022-2023 and 2023-2024 Capacity Commitment Periods (“CPP”) as a price taker at \$0/kW-month in spite of these units having costs well above the competitive price level expected in future years.
7. ISO-NE asserts that it needs Mystic Units 8 and 9 for at least two years while it begins the process of developing a market design to eliminate the need to hold resources out-of-market for fuel security, which market solution will likely not be in effect until FCA 16.
8. Some market observers would look at the situation faced by ISO-NE and conclude there is an inherent tension between enforcing competitive market outcomes to the benefit of the supply-side of the market or ensuring customers on the demand-side of the market do

not pay twice for any amount of capacity. The framing of the situation in this manner views this as a zero-sum game between producers and consumers. It is not.

9. The question for the Commission and ISO-NE is how to achieve the objectives of ensuring just and reasonable rates while maintaining reliability. Importantly, these objectives are not at odds with each other and in fact are complementary. Just and reasonable rates are critical to ensuring reliability. As shown below, the failure to ensure just and reasonable rates in the ISO-NE FCM will further harm and erode the reliability ISO-NE seeks to preserve from its waiver filing.
10. Inserting Mystic Units 8 and 9 into the FCM as price takers will result in (1) prices below competitive levels; (2) the inefficient displacement of lower cost resources by higher cost resources; (3) potential increases in costs to consumers above what would be observed under a competitive outcome; and (4) a cascading “death spiral” of further requests for cost-of service contracts and price suppression.
11. Unfortunately, ISO-NE does not provide simulation scenarios of the type provided by PJM following each three-year-forward capacity auction that provides information regarding market results by inserting capacity resources into the auction as price takers.² Furthermore, there are no publicly available supply offers available by which to construct a supply curve to assess how market results change with respect to inserting the approximately 1400 MW of price taking capacity from Mystic Units 8 and 9 into FCA 13 and FCA 14.

² PJM Interconnection, L.L.C., “Scenario Analysis for 2020/2020 Base Residual Auction”, available at <http://pjm.com/-/media/markets-ops/rpm/rpm-auction-info/2020-2021-bra-scenarioanalysis.ashx?la=en>.

12. However, it is possible to construct a supply curve based upon previous auction results including cleared capacity, capacity prices in \$/kW-month, and information published by ISO-NE. The methodology is presented in Attachment A to this affidavit, but the methodology results in supply curves grounded in actual market outcomes with adjustments for new entry in each auction year.
13. I present results for two different shaped supply curves. The first is a supply curve that is relatively flat over the region where supply and demand intersect. In some sense, one can view this supply curve as being quite elastic relative to the demand for capacity. The other supply curve is steeper in the region where supply and demand intersect, and can be considered more inelastic, or less responsive to changes in price.

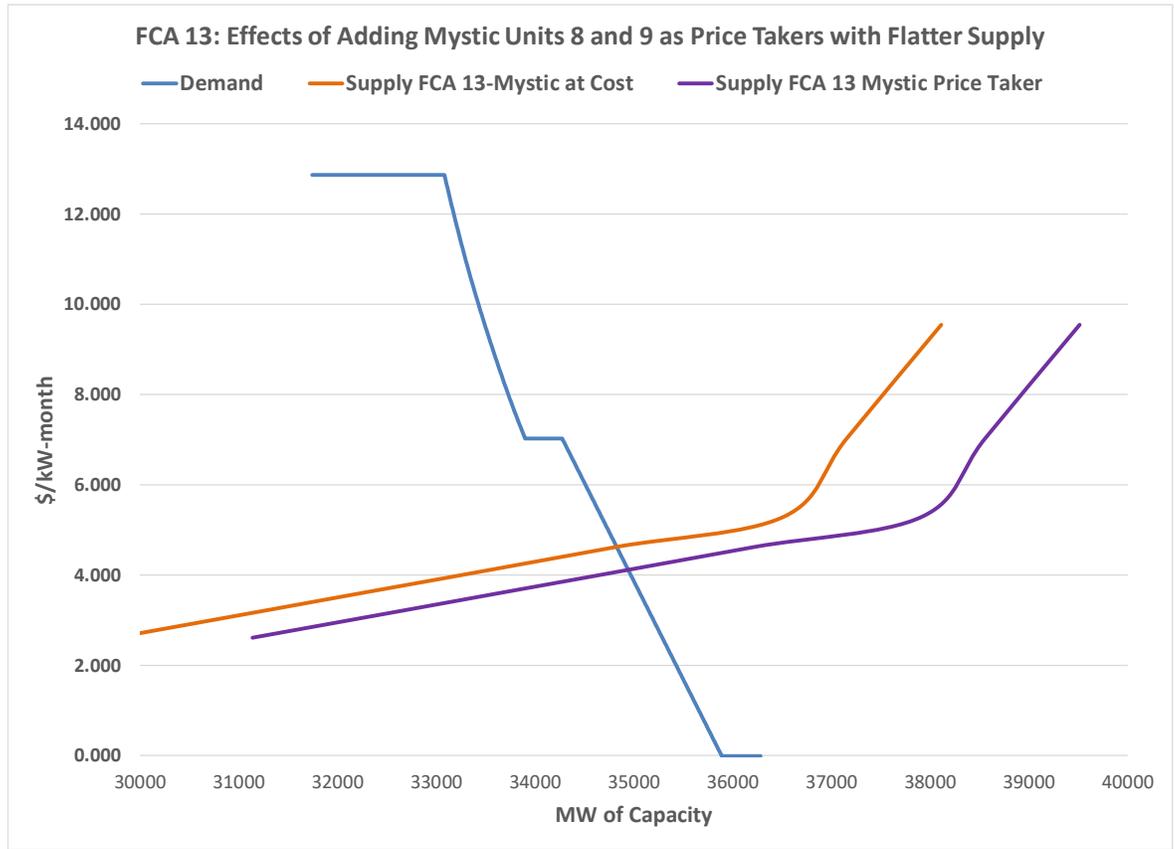
A. Effects of Mystic Units 8 and 9 Offered as Price Takers into FCA 13

14. Inserting 1400 MW associated with Mystic Units 8 and 9 as price taking resources into this relatively flat supply curve, provides an upper bound estimate on the potential displacement of lower cost resources, and a lower bound estimate on reductions in price from the competitive level. The competitive outcome is shown in Figure 1 where the dark blue, downward sloping demand for capacity intersects the competitive supply curve shown by the orange upward sloping curve.
15. The effect of offering Mystic Units 8 and 9 as price takers, shown by the purple supply curve in Figure 1, is a \$0.51/kW-month reduction in price to \$4.12/kW-month,³ 11% below the competitive price of \$4.63/kW-month if the Mystic Unit 8 and 9 de-list bids are simply permitted to clear the FCA (and not re-priced).). Furthermore, the cleared capacity of 34,943 MW, while slightly higher than the competitive level, results in 1285

³ The prices are rounded to the nearest \$0.01.

MW of capacity with costs between \$4.12/kW-month and \$4.63/kW-month that are inefficiently displaced by the Mystic Units with actual costs well above \$4.63/kW-month. The effect on overall capacity market revenues to those resources receiving a CSO is nearly \$214 million per year.

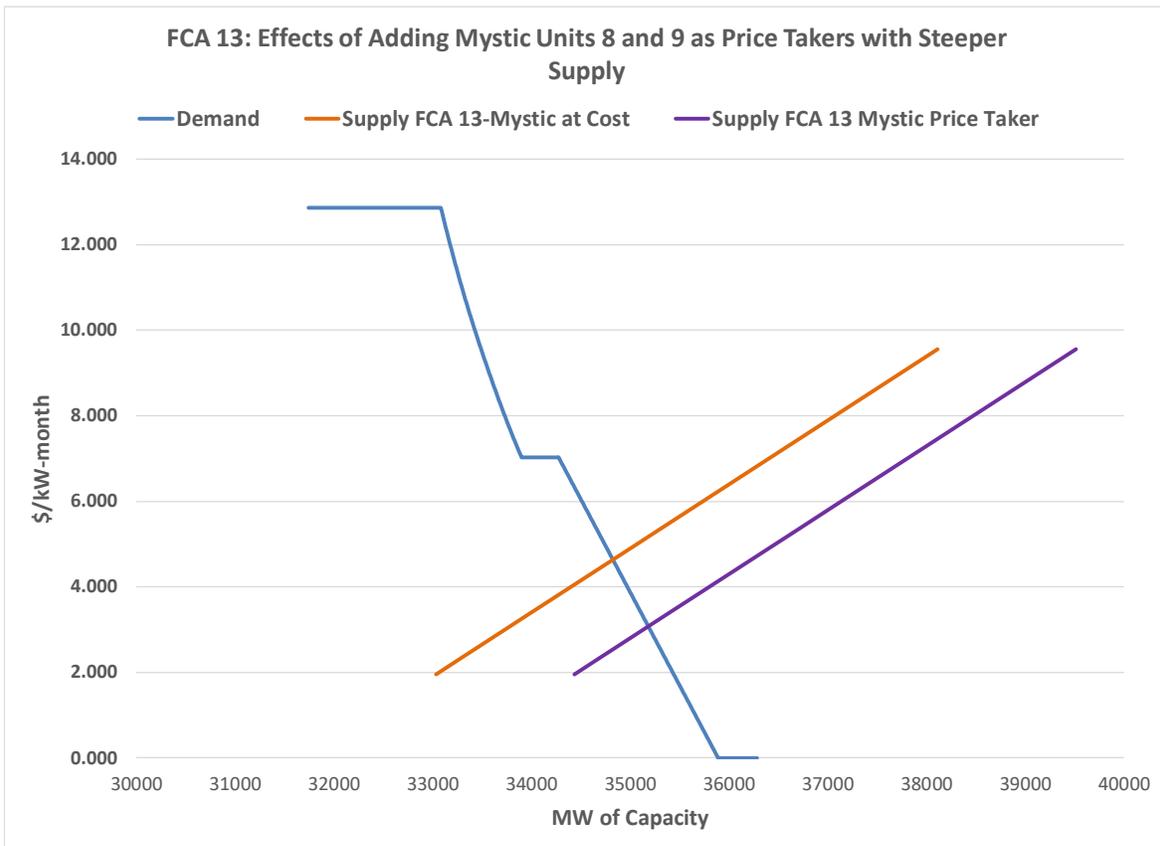
Figure 1



- The results of inserting the 1400 MW of capacity associated with Mystic Units 8 and 9 as price-taker resources into this relatively steep supply curve, as shown in Figure 2, provides a lower bound estimate on the potential displacement of lower cost resources, and an upper bound estimate of reductions in price from the competitive level. The effect of offering Mystic Units 8 and 9 as price takers is a reduction in price of \$1.52/kW-month to \$3.11/kW-month, or 33% below the competitive price of \$4.63/kW-month that would

have been observed if Mystic 8 and 9 had not been inserted as price takers as shown by the purple supply curve in Figure 2. Furthermore, the cleared capacity of 35,178 MW, while slightly higher than the competitive level and the clearing with the flatter supply curve, results in 1050 MW of capacity with costs between \$3.11/kW-month and \$4.63/kW-month that are inefficiently displaced by a resource with actual costs well above \$4.63/kW-month. The effect on overall capacity market revenues to those resources receiving a CSO is just under \$642 million per year.

Figure 2



17. Regardless of whether the impact is at the lower bound or upper bound estimates, or somewhere in between, the damage to the market is significant both in terms of artificial price suppression and the inefficient displacement of lower cost resources. This inefficient allocation of CSOs raises the overall costs of meeting ISO-NE’s ICR. But

even more importantly, particularly in the wake of ISO-NE's fuel security report, treating Mystic Units 8 and 9 as price takers may further displace resources ISO-NE needs to ensure fuel security during the winter season.

B. Effects of Inserting Mystic Units 8 and 9 in FCA 13 as Price Takers is Magnified Further in FCA 14 as More Resources May Need the Same Treatment

18. To continue the analysis of the estimate of harm to the ISO-NE FCM, fast forward one year to FCA 14. Assume for the sake of example that the demand for capacity is the same used before for FCA 13, and the supply curve has the same shape and characteristics as before in the upper and lower bound estimates.
19. In both the flatter supply curve and the steeper supply curve case more than 1000 MW of resources were inefficiently displaced. Now for FCA 14, they would likely submit de-list bids to retire. Assume that 1000 MW of these resources are fuel secure and that ISO-NE needs to retain them to ensure winter reliability.
20. In the case of the flatter supply curve shown in Figure 3, adding this 1000 MW of fuel secure resources displaced in FCA 13 as additional price takers in FCA 14 results in the shifted supply curve in red as shown in Figure 3. The resulting price in FCA 14 is \$3.76/kW-month, or \$0.36 below the previous price of \$4.12/kW-month in FCA 13 and \$0.87/kW-month below the competitive price that would be observed absent inserting these fuel secure resources into the FCA as price takers. The cleared quantity of capacity is 35,025 MW. The insertion of the additional 1000 MW as a price taker displaces an additional 918 MW of otherwise economic capacity from the market with capacity of higher costs. The implication in FCA 14 for total capacity market revenues is a decrease of almost \$366 million from what would be obtained if FCA 14 would have resulted in

competitive outcomes. The overall impact over FCA 13 and FCA 14 would be a cumulative decline in capacity market revenues of \$580 million.

Figure 3



21. With respect to the steeper supply curve, adding the additional 1000 MW of fuel secure resources as price takers in FCA 14, as shown in Figure 4 with the shift to the red supply curve, results in a further erosion of prices and further displacements of otherwise economic, lower cost resources. The price in FCA 14 would fall to \$2.01/kW-month, or \$2.62/kW-month below the competitive price, and \$1.11/kW-month below the already suppressed price of \$3.11/kW-month in FCA 13 as shown in Figure 4. The cleared quantity is 35,420 MW, which implies that 775 MW of lower cost, otherwise economic resources are displaced by inserting an additional 1000 MW into FCA 14 as price takers. In the case of the steep supply curve, the decline in revenue relative to a competitive

outcome is just over \$1.11 billion in FCA 14, and cumulatively nearly \$1.75 billion over FCA 13 and FCA 14.

Figure 4



C. Allowing High Cost Resources Needed for Fuel Security to be Inserted into the FCA as Price Takers Can Result in a “Death Spiral” of Decreasing Prices and Increasing Inefficient Displacement of Resources

22. These above examples could be taken one or two more iterations, but it does not change the result. “Committing the original sin” of inserting Mystic Units 8 and 9 into the auction as price takers begets an ever-growing problem of additional fuel secure resources being displaced from the market, leading ISO-NE to hold those displaced resources for reliability and magnifying the problem in subsequent FCAs, leading to even lower prices and further displacing otherwise economic resources.

23. With the possibility that ISO-NE may hold additional resources for fuel security (beyond Mystic Units 8 and 9 and those compelled to retire due to the “death spiral”) the two tables below show how adding ever greater amounts of price-taking capacity further depresses capacity clearing prices and increases inefficient displacement.
24. Table 1 shows the effect of adding different amounts of above market cost capacity as price takers with the flatter supply curve. Due to the flat nature of the supply curve around the demand as seen in Figures 1 and 3, the decline in prices is not as sharp, but there are large amounts of displacement of lower cost resources.

Table 1: Flat Supply Curve Scenarios Showing Price Suppression and Inefficiently Displaced Capacity

Scenario	\$/kW-month	MW Cleared	MW Displaced From Competitive Solution	Annual Revenue Impact (\$ millions)
Competitive	4.63	34,828	----	----
Mystic Units	4.12	34,943	1,285	-214
Mystic +1000	3.76	35,025	2,203	-366
Mystic + 2000	3.38	35,115	3,113	-527
Mystic + 3000	3.03	35,195	4,033	-676

25. Table 2 shows similar results for the steep supply curve. With this supply curve, the price changes are much more dramatic, but the displacement is not nearly as great as with the flatter supply curve. Adding 3000 MW in addition to the Mystic Units in this case drives the capacity price to zero.

Table 2: Steep Supply Curve Scenarios Showing Price Suppression and Inefficiently Displaced Capacity

Scenario	\$/kW-month	MW Cleared	MW Displaced From Competitive Solution	Annual Revenue Impact (\$ millions)
Competitive	4.63	34,828	----	----
Mystic Units	3.11	35,178	1,050	-642
Mystic +1000	2.01	35,420	1,808	-1,110
Mystic + 2000	0.90	35,685	2,543	-1,597
Mystic + 3000	0.00	> 35,892	>3,336	< -1,994

26. Taking these examples to their logical conclusion would result in the likely outcome of all fuel secure resources being paid through cost-of-service reliability contracts at above market prices in a manner that is not transparent to the rest of the market. Furthermore, the FCM would effectively become a bifurcated regime, “half market, half re-regulated” where the market resources are not the fuel secure resources needed by ISO-NE for winter reliability, and the critical reliability resources needed in the winter would be paid out-of-market without any competition by new entrants.
27. The result of inserting high-cost resources as price takers sends exactly the opposite price signals to the market of what should be sent. As resources that are critical to reliability want to retire, prices should go up to signal to potential new entrants or existing resources that adding fuel secure capabilities is needed and will be rewarded. Instead, prices are falling and there is no incentive to add or retain fuel secure capabilities until a cost-of-service contract is offered by ISO-NE.
28. As increasing amounts of capacity are held under cost-of-service contracts, risk is effectively being shifted from generation owners back to load. And because capacity

prices are being driven downward, no needed new entry will likely be forthcoming, and the resources held for reliability under cost-of-service contracts will need to be retained under these arrangements on a long-term basis. This is the opposite of the intent of such “reliability-must-run (“RMR”) contracts” which are designed to be temporary until the reliability situation can be resolved. In this instance, the reliability situation would not be resolved but would continue to deteriorate due to the treatment of fuel secure resources retained through cost-of-service contracts as price takers.

IV. NEPGA’S PROPOSED REMEDY PRESERVES THE ECONOMICALLY EFFICIENT SET OF CSO IN THE FCA, RESULTS IN COMPETITIVE PRICES, AND BETTER PRESERVE RELIABILITY THAN ISO-NE’S PROPOSED PRICE TAKING TREATMENT

29. The NEPGA proposal has two complementary components. The first piece is to insert the above-market cost resources being held for fuel security into the FCM at their actual costs rather than as price takers. This has the effect of preserving the competitive outcomes in the FCA. The second component is to offer the above market cost, fuel secure resource being held for reliability into the three Annual Reconfiguration Auctions (“ARA”) associated with each FCA (one third of its FCA Qualified Capacity in each) as a price taker which would allow the above market cost resource to obtain a CSO.
30. The NEPGA proposal looks very much like the CASPR mechanism recently approved by the Commission in that it “mitigates” the above market cost resource being held for reliability in the FCA in exactly the same manner as State Sponsored Resources would be mitigated under the CASPR mechanism approved by the Commission.
31. The NEPGA proposal differs in that by offering the above-market resource into the ARAs as a price taker and given the ISO-NE supplied system demand curve, all of the capacity being held for reliability will clear in the FCA or an ARA. Since the action being

mitigated does not involve new entry and is only a delay in retirement, there is no need or requirement for resources that have obtained CSOs in the FCA to buy out their obligations in an ARA to allow the resource being held for reliability to obtain a CSO.

32. Revenues due the resources being held for reliability for clearing in an ARA, in this case Mystic Units 8 and 9, would be netted against the costs of the RMR contract being offered by ISO-NE to keep these resources in commercial operation. Suppose the Mystic Units 8 and 9 receive \$1/kW-month from clearing an ARA. While this may be below the price they could have received in the FCA as a price taker, the competitiveness of the FCA is maintained. But this is consistent with the fact that these resources are not being held for capacity, they are being held for a fuel security service beyond the CSO traded in the FCA. The \$1/kW-month revenue from the ARAs translates to \$16.8 million in revenue that goes toward offsetting the cost of the cost-of-service contract.
33. Regardless of the ARA clearing prices, customers are better off than simply holding out Mystic Units 8 and 9 from both the FCA and the ARAs and paying for the associated capacity through a cost-of-service contract. If the ARAs clear at positive prices, customers get the benefit of having the Mystic Units obtaining a CSO, with the associated revenues offsetting how much load has to pay for the cost-of-service contract. If the ARAs cleared at a price of \$0/kW-month, customers would be getting that additional capacity for nothing, but still have to pay for the cost-of-service contract. In both cases, the load pays the same cost, but gets the benefit of the Mystic Units receiving revenue associated with obtaining a CSO. In contrast, if the Mystic Units were held out of both the FCA and the ARAs, then customers would not only pay for the cost-of-service

contract, but they would also pay additional costs to resources obtaining a CSO in the ARAs that were not being held for reliability.

34. In short, NEPGA’s proposal to insert the Mystic Units 8 and 9 into the ARAs rather than the FCA preserves both competitive markets and reliability, promotes the orderly entry and exit of resources, and avoids the “death spiral” of continual declines in prices and inefficient displacement of resources that could harm reliability.

V. TREATING RESOURCES RETAINED FOR FUEL SECURITY AS PRICE TAKERS UNDERMINES THE “FIRST PRINCIPLES” OF CAPACITY MARKETS

35. The Commission, in its recent approval of the ISO-NE CASPR design, defined the following “first principles” of capacity markets. Specifically, the Commission stated:

A capacity market should facilitate robust competition for capacity supply obligations, provide price signals that guide the orderly entry and exit of capacity resources, result in the selection of the least-cost set of resources that possess the attributes sought by the markets, provide price transparency, shift risk as appropriate from customers to private capital, and mitigate market power. Ultimately, the purpose of basing capacity market constructs on these principles is to produce a level of investor confidence that is sufficient to ensure resource adequacy at just and reasonable rates. Where participation of resources receiving out-of-market state revenues undermines those principles, it is our duty under the FPA to take actions necessary to assure just and reasonable rates. In previous settings of that nature, to address the impact of out-of-market state support on wholesale capacity markets, the Commission has accepted market rules that impose a MOPR on resources receiving such out-of-market support.⁴

36. The issue of artificial price suppression and its deleterious implications for the market is an issue the Commission has been concerned with since the advent of forward capacity markets. The Commission’s focus initially centered on the exercise of buyer-side market

⁴ CASPR Order at P 21.

power, price taking offers by high cost resources, which are non-competitive by definition. As a practical matter, however, the investment and reliability implications from any non-competitive offers are the same regardless of whether they are the product of inefficient market rules, which is at issue in this case with the ISO-NE waiver request, or buyer-side market power. The Commission has previously noted, “A capacity market will not be able to produce the needed investment to serve load and reliability if a subset of suppliers is allowed to bid non-competitively to suppress market prices.”⁵

37. As discussed further below, the participation of out-of-market units retained for fuel security is fundamentally inconsistent with the first principles articulated by the Commission in the CASPR Order.

A. The Participation of Units Retained for Fuel Security as Price Takers Will Undermine Competitive Markets

38. There are several characteristics that are typically associated with a robust competitive market for capacity. The first is that prices in a competitive framework should be equal to the marginal or incremental cost for satisfying the demand for capacity to ensure resource adequacy.
39. The second is that at the competitively determined price, all resources receiving a CSO should have costs below the market price. In practice, this means that no resource should want to change its CSO status, given the competitive price. Resources with costs below the price are happy to accept a CSO since it is profitable to do so. Resources with costs above the competitively determined price are happy to not accept a CSO since the cost of doing so exceeds the revenue they would collect.

⁵ *PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,157 P 90.

40. Third, market surplus is maximized (*i.e.*, the sum of producer and consumer surplus is maximized). In the FCM, the consumer surplus is defined as the difference between the willingness to pay, defined by the demand curve, and the market price. The producer surplus is defined as the difference between the market price, and what producers are willing to accept.
41. The analysis above shows the impact of treating resources retained for fuel security as price takers on competitive markets. First, prices shown in Tables 1 and 2 are below the actual incremental cost of meeting resource adequacy in the absence of such treatment. One could even argue the incremental cost of the resource retained for reliability is higher than the market price of \$4.63/kW-month.
42. Second, the high cost resource, with a cost significantly above the market price, displaces lower cost resources that were available and that could have satisfied the remaining demand for capacity at a much lower cost.
43. Third, producer surplus has been reduced considerably. At the same time, consumers overall are worse off as they pay more for the out-of-market resource, than they gain in any transfer of consumer surplus. Overall, there is also now a deadweight loss which is an overall loss in efficiency.

B. Treating Fuel Secure Resources with Above-Market Costs as Price Takers Impairs the Selection Of The Least-Cost Set Of Resources

44. As noted by the Commission in the CASPR order, an efficient capacity market should result in the selection of the least-cost set of resources that possess the attributes necessary to maintain reliability.
45. In the case of the ISO-NE capacity market, this means that CSOs should be allocated to the least-cost set of resources needed to satisfy the demand for capacity to ensure

reliability. If there were lower cost resources available, they would have been chosen and the competitive price would be lower.

46. Treating fuel secure resources as price takers impairs the ability of a capacity market to achieve the objective of selecting a least-cost set of resources. As noted in the analysis above, 1400 MW or more of above-market cost resources were inserted into the FCA as price takers and displaced nearly as much capacity that had lower costs and were otherwise economic as shown in Tables 1 and 2. The set of resources with a CSO under ISO-NE's price taking treatment for above-market cost resources retained for reliability are not the least-cost for meeting the reliability requirement.

C. Treating Fuel Secure Resources with Above-Market Costs as Price Takers Impairs the Ability of the Market to Result in the Orderly Exit and Entry of Resources

47. Resources in the ISO-NE markets should have the opportunity to collect sufficient revenues from participation in the energy, ancillary service, and capacity markets to cover any going forward costs, including needed incremental investment, plus returns. To the extent that sufficient revenues cannot be earned due to low prices and low demand for output and/or high going forward costs, resources will retire or exit from the market. Conversely, if resources earn sufficient revenues to cover their going forward costs plus earning returns, they will remain in commercial operation.
48. Entry will occur by new resources to the extent they believe they can earn sufficient revenues to cover their going forward costs plus returns. New entrants tend to be more efficient than existing resources in that they have lower going forward costs and or lower operating costs that allow them to earn sufficient revenues to be profitable.
49. Prices in the FCM tend to signal the need for new entry, the desire for some high cost resources to exit, or the retention of existing resources.

50. When market rules are in place that retain resources that would otherwise wish to retire, displace resources that are cost-effective to be retained, or discourage new entry when it is needed, the market outcomes are unjust, unreasonable, and unduly discriminatory.
51. If ISO-NE treats Mystic 8 and 9 as price takers, the Forward Capacity Market will send the wrong price signals to existing and new resources alike. Prices will fall as more and more resources are being held for reliability as shown in the analysis above.
52. In other words, ISO-NE will be retaining a higher cost resource that would otherwise exit the market based solely on its competitive offer price, while the market sends a price signal to lower cost resources to exit the market.
53. Moreover, prospective new entrants would see a price signal that is below competitive levels indicating new entry is not needed, yet they would also observe above-market resources, with certain reliability characteristics sought by ISO-NE, being retained.
54. The mixed and counter-intuitive signals caused by ISO-NE's treatment of resources retained for fuel security as price takers will not lead to orderly entry, exit, or retention of resources and is therefore inconsistent with the first principles of capacity markets.

D. Treating Fuel Secure Resources with Above-Market Costs as Price Takers Impedes Price Transparency

55. As the Commission recognized in the CASPR Order, transparency is key to a just and reasonable capacity market. In a competitive capacity market, information regarding capacity prices and the amount of cleared capacity is available publicly to all market participants, interested new entrants, and other interested parties. This transparency helps facilitate the orderly entry and exit of resources from the market.
56. Market rules that result in compensation or payments to resources that are not reflected in market prices are inconsistent with this principle. Such "out-of-market" contracts

cannot be seen by other participants or parties when such information could be valuable regarding the current state of the market.

57. Treating Mystic Units 8 and 9 as price takers in the FCA will result in market prices that are unconnected to the actual cost of maintaining reliability within New England.
58. Load responsible for paying for capacity in the FCM will be facing an effective price for capacity that does not match up with the market price for capacity, which may lead them to undertake actions on the demand-side that are otherwise not economic in order to avoid the higher and non-transparent final cost of capacity.

E. Treating Fuel Secure Resources with Above-Market Costs as Price Takers Results in Shifting Risks to Customers and other Resources Owners Contrary to the Commission's First Principles.

59. Risk for private investment in wholesale markets comes in many forms. It can be risk associated with technological changes that makes new technologies or fuels more competitive relative to older technologies. It can be risks associated with resource performance, especially with the pay-for-performance construct adopted by ISO-NE for the FCM.
60. Overall, shifting risk to resource owners (the owners of capital) was one of the features of restructuring wholesale power markets more than 20 years ago. If resource owners can perform well and invest in new technologies to keep up with technological advancement and keep costs down, they will thrive in competitive markets. If resource owners are operating older, higher cost technologies that are being supplanted by newer, more efficient, lower cost technologies, they will eventually retire.
61. If customers are compelled to underwrite "out-of-market" contracts that are then treated as price takers, the price suppression associated with these contracts will only beget

additional “out-of-market” contracts as otherwise economic resources are inefficiently displaced and seek to retire, as the above analysis clearly shows.

62. Furthermore, “out-of-market” actions that are enforced through the market, such as treating above-market cost resources as price takers, can shift risk from resource owners who are the recipients of “out-of-market” contracts to resource owners who face the market impacts of such “out-of-market actions” through lower prices and through inefficient displacement in spite of having costs below that of the “out-of-market” resources. Another way of viewing this is to observe that risk has been shifted from high cost resources that should retire but are retained for reliability, to low cost resources that should be retained as part of least-cost set of resources but are given the signal to retire.

F. Treating Fuel Secure Resources with Above-Market Costs as Price Takers Leads to Market Results that are Observationally Equivalent to an Exercise of Buyer-Side Market Power

63. Since the beginning of wholesale power markets over 20 years ago, the Commission has consistently supported rules to prevent the exercise of market power to ensure competitive outcomes and just and reasonable rates. It does not matter whether market power is being exercised by resource owners in an effort to artificially drive up wholesale prices, or buyers of wholesale power who have engaged in efforts to artificially suppress market prices that also leads to deviations from least-cost market results.
64. To be very clear, there is no attempt to exercise buyer-side market power through the retention of Mystic Units 8 and 9 and inserting them into the FCA as price takers. However, the action of inserting any “out-of-market” cost resource into the FCA as a price taker is observationally equivalent to an exercise of buyer-side market power in terms of artificial price suppression and inefficient displacement of otherwise economic resources as shown above.

65. As the Commission explicitly noted in the CASPR Order, “Where participation of resources receiving out-of-market state revenues undermines those principles, *it is our duty under the FPA to take actions necessary to assure just and reasonable rates (emphasis added).*”⁶ Out-of-market “state” revenues are not the question in this case, the treatment of Mystic Units 8 and 9 as price takers will suppress prices just as an exercise of buyer-side market power would.

66. This concludes my affidavit.

⁶ CASPR Order at P 21.

Attachment A

to the

Affidavit of Paul M. Sotkiewicz, Ph.D.

In Docket No. EL18-____-000

CONSTRUCTING SUPPLY CURVES FROM THE RESULTS OF RECENT FORWARD CAPACITY AUCTIONS

1. Supply curves from previous FCAs are not publicly available. In order to conduct the analysis in this affidavit, it was necessary to construct supply curves that were based on data that was publicly available from the market clearing results from FCAs 9-12 in which a downward sloping demand curve had been used. Fortunately, ISO-NE publishes results for system wide prices and includes the amount of new entry in each FCA that aids in developing the supply curve.
2. Supply curves should be upward sloping and the quantities supplied should be monotonically weakly increasing in the price of capacity. As can be seen in Table A, proving the clearing prices, clearing quantities, and new entry in each of the FCAs, the results of FCAs 9-12 do not conform to this requirement as we observe market clearing quantities increasing as the clearing price has decreased in FCA 9-11.

Table A: Summary FCA 9-12 Results

FCA	Market Price (\$/kw-Month)	Market Quantity (MW)	Total New Entry (MW)
9	9.550	34695	1,427
10	7.030	35567	1,830
11	5.300	35835	904
12	4.630	34828	688

3. Given the pattern of clearing prices and clearing quantities shown in Table A, some adjustments and assumptions are required to ensure an upward sloping supply curve. First, an “anchor point” of the supply curve was chosen to be the market clearing price and quantity from FCA which takes this level of capacity as given in future FCAs. Second, I assume the market clearing price system-wide is set by existing resources. This

assumption makes sense if new entry is supposed to be lower cost than the existing resource mix.

4. Under these assumptions, I then adjusted the market clearing quantities in FCA 10-12 by subtracting off the amount of new entry that cleared in each of those current and previous FCAs. For example, to get the adjusted quantity associated with FCA 10, just subtract off the new entry from FCA 10 of 1,830 MW. The adjusted quantity associated with FCA 11 subtracts off the new entry from both FCA 10 and FCA 11 totaling 2,734 MW. The adjusted quantity associated with FCA 12 subtracts off the new entry from FCAs 10, 11, and 12 totally 3,422 MW. Note the assumption of the results from FCA 9 as being the anchor point and no adjustment was made to the FCA 9 results. Table B gives shows a supply curve for existing resources. Note the pattern of supply in Table B holds, quantities are now decreasing as the price decreases.

Table B: Supply Curve for Existing Resources

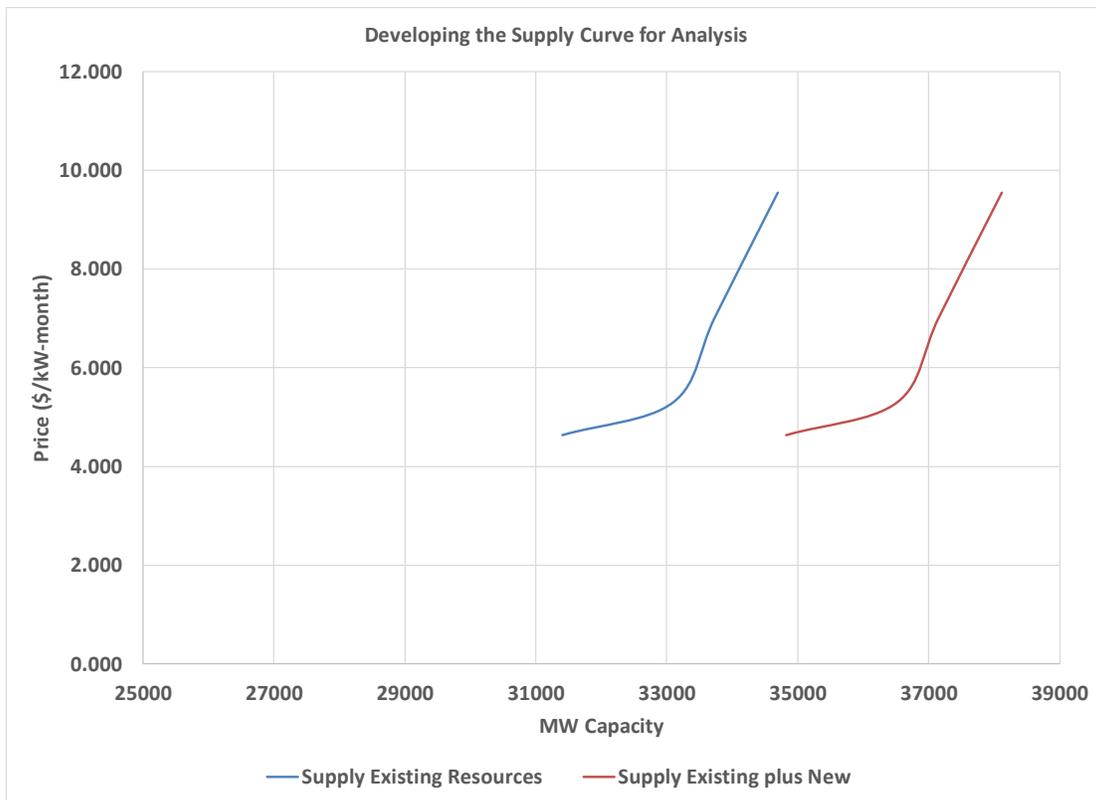
FCA	Market Price (\$/kw-Month)	Adjusted Quantity (MW)
9	9.550	34695
10	7.030	33737
11	5.300	33101
12	4.630	31406

5. While the proper relationship between prices and quantities supplied are correct in Table B, it is important to add back into these quantities all the new entry that has taken place overall in FCA's 10-12 (again, FCA 9 is the anchor point). Total new entry over the three FCAs 10, 11, and 12 is 3,422 MW. Table C provides the Final Quantity of supply accounting for all the new entry that has taken place by adding 3,422 MW to each of the adjusted quantities, including FCA 9. Graphically these are shown in Figure A as well.

Table C: Final Base Supply Curve

Market Price (\$/kw-Month)	Adjusted Quantity Existing Resources (MW)	Final Quantity Existing plus New Resources (MW)
9.550	34695	38117
7.030	33737	37159
5.300	33101	36523
4.630	31406	34828

Figure A: Developing the Supply Curve



- The final base supply curve shown in Table C in the last column, and the red shifted supply that shows the existing plus new resources in Figure A is used to develop the two different supply curves used in the analysis. Each of those supply curves match the market clearing price and market clearing quantity of capacity observed from FCA 12 after all the adjustments performed to get to the base supply curve.

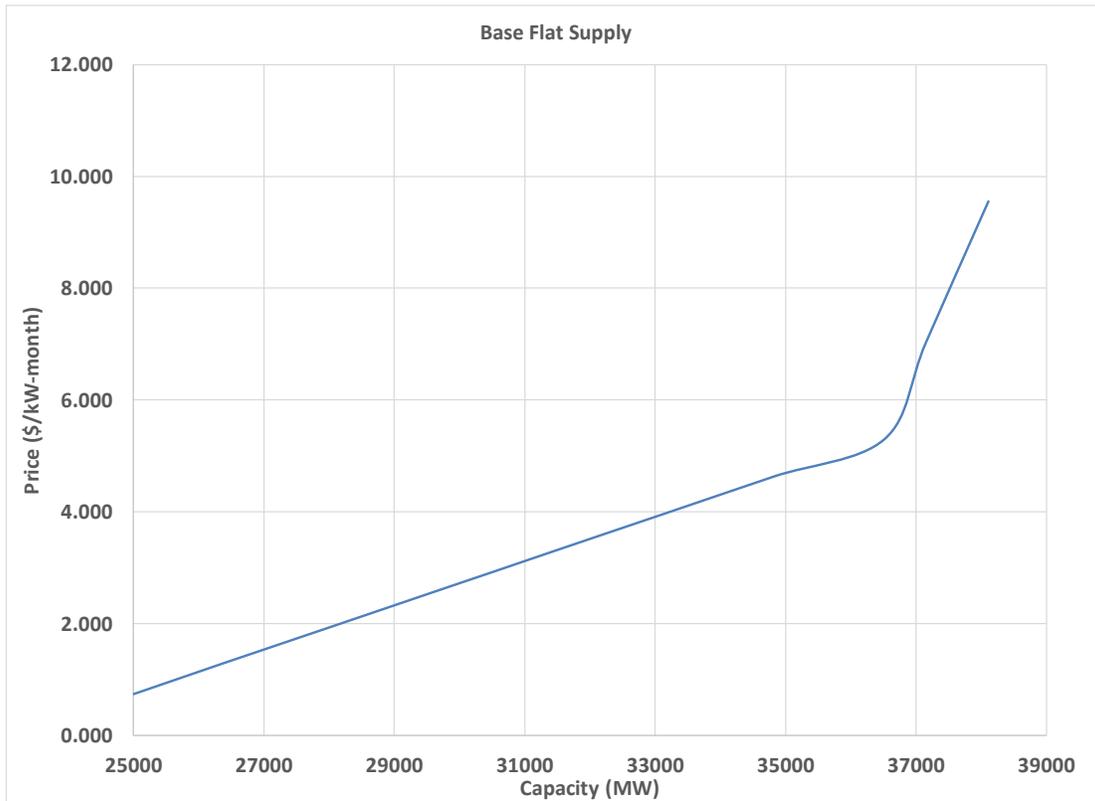
A. Developing the Relatively Flat Supply Curve Used in the Analysis

7. The relatively flat supply curve used in the analysis used a simple linear interpolation from the last points on the supply curve shown in Table C. At a price of \$5.30/kW-month the quantity supplied is 36,523 MW and at a price of \$4.63/kW-month the quantity is 34,828 MW. That is for every \$0.67/kW-month decrease in price, the quantity supplied falls by 1,695 MW. This results in the supply curve show in Table D and Figure B.

Table D: Base Flat Supply Curve used in the Analysis

Market Price (\$/kW-Month)	Final Quantity Existing plus New Resources (MW)
9.550	38117
7.030	37159
5.300	36523
4.630	34828
3.960	33133
3.290	31438
2.620	29743
1.950	28048
1.280	26353
0.610	24658
0.000	22963

Figure B: Base Flat Supply Used in the Analysis



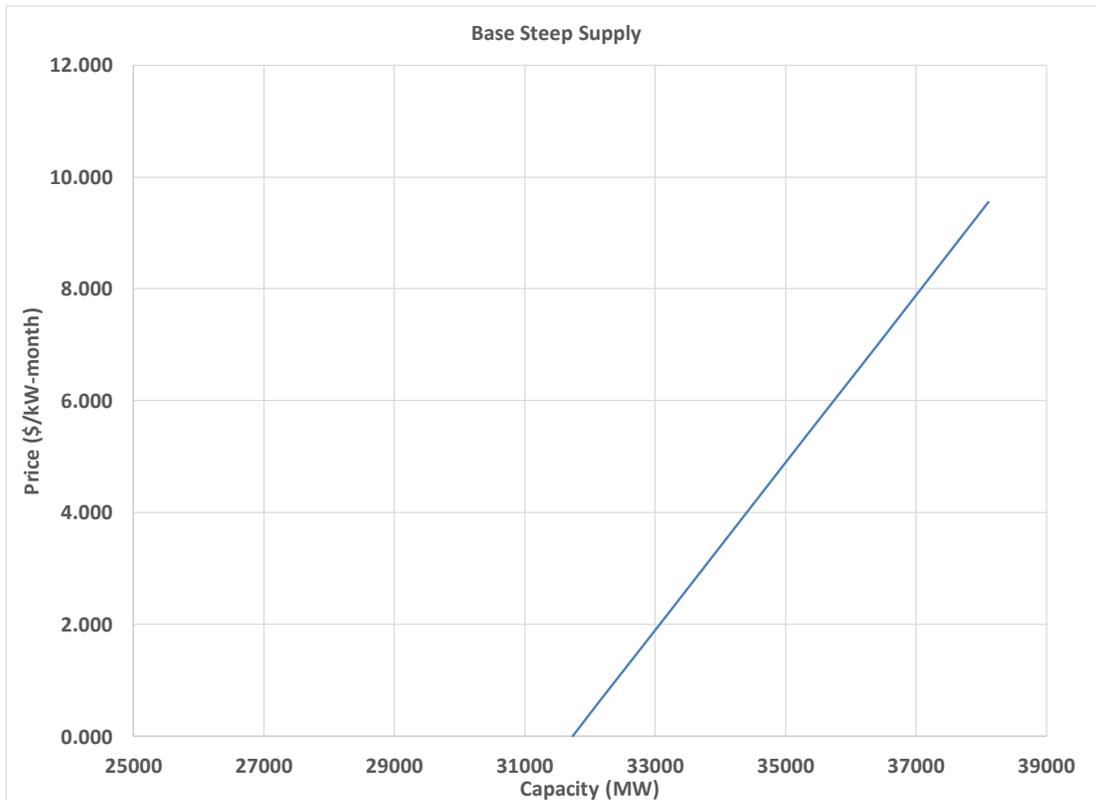
B. Developing the Relatively Steep Supply Curve Used in the Analysis

8. The relatively steep supply curve used in the analysis used a simple linear interpolation between the highest price point on the supply curve and the lowest point on the supply curve shown in Table C. At a price of \$9.55/kW-month the quantity supplied is 38,117 MW and at a price of \$4.63/kW-month the quantity is 34,828 MW. That is for every \$0.67/kW-month decrease in price, the quantity supplied falls by 668.5 MW. This results in the supply curve show in Table E and Figure C. The MW quantities in Table E have been rounded to the nearest whole number.

Table E: Relatively Steep Supply Curve Used in the Analysis

Market Price (\$/kw-Month)	Final Quantity Existing plus New Resources (MW)
9.550	38117
7.030	36432
5.300	35276
4.630	34828
3.960	34380
3.290	33932
2.620	33484
1.950	33036
1.280	32589
0.610	32141
0.000	31733

Figure C: Base Steep Supply Curve Used in the Analysis



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

New England Power Generators Association,
Complainant)
v.)
ISO-New England, Inc.,
Respondent.)

Docket No. EL18-____-000

AFFIDAVIT

Paul M. Sotkiewicz, Ph.D., being duly sworn, deposes and states that the statements contained in the foregoing Affidavit of Paul M. Sotkiewicz, Ph.D. are true and correct to the best of his knowledge and belief.

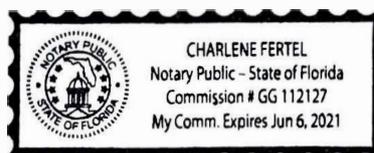


Paul M. Sotkiewicz, Ph.D.

Subscribed and sworn to before me
this 23rd day of May, 2018



Notary Public for Charlene Fertel
the State of Florida



My Commission expires: 06/06/2021

Exhibit 2

I. Annual Reconfiguration Auction Approach Design

This approach occurs in three fundamental steps.

- First, if ISO-NE deems an existing capacity resource needed for fuel security (“Fuel Security Resource”),¹ it will be offered into the Forward Capacity Auction (“FCA”) at its Retirement De-List Bid price, as mitigated (if at all) by ISO-NE’s Internal Market Monitor, as approved by FERC. If the Retirement De-List Bid is on the margin or infra-marginal, the Fuel Security Resource acquires a Capacity Supply Obligation (“CSO”) in the FCA. In this case, no further steps are necessary. The Fuel Security Resource simply clears the Forward Capacity Auction based on its competitive offer price. Because the Fuel Security Resource is (presumably) compensated at its unit-specific costs (*e.g.*, pursuant to some form of cost-of-service agreement), the FCA clearing price would be credited against the cost-of-service rate.
- In the second step, in the case where the Retirement De-List Bid for the Fuel Security Resource clears in the FCA (*i.e.*, the resource fails to obtain a CSO), the Fuel Security Resource is offered as supply in each of the three Annual Reconfiguration Auctions (“ARAs”) associated with the Capacity Commitment Period and FCA in which the Retirement De-List Bid cleared, in a quantity equal to one-third of the Fuel Security Resource’s FCA Qualified Capacity at \$0/kW-month. Thus over the three ARAs, the Fuel Security Resource will have offered all of its FCA Qualified Capacity. At present, the Tariff provides that a cleared Retirement De-List Bid causes the resource to lose its capacity and energy interconnection rights, but under this proposal the Fuel Security Resource will retain those rights in order to be eligible to participate as capacity supply in the ARAs.

In each ARA, ISO-NE offers the capacity supply that cleared in the associated FCA as ARA supply at \$0/kW-month. Any resource with uncommitted qualified capacity may also offer as supply in an ARA. Under this second step, one-third of the Fuel Security Resource’s FCA Qualified Capacity would likewise be offered as supply at \$0/kW-month in each ARA, guaranteeing that it clears against the demand curve. In the ARAs, demand and supply clear against the demand curve and do not require an offsetting demand bid or supply offer to clear. A supply offer of \$0/kW-month will clear against the demand curve in all cases. By clearing its FCA Qualified Capacity over three ARAs, the Fuel Security Resource will obtain a Capacity Supply Obligation for its total FCA Qualified Capacity for the relevant Capacity Commitment Period.

- Third, any revenues gained by the Fuel Security Resource by clearing in the ARAs are netted against the unit-specific compensation being paid to the Fuel Security Resource, *e.g.*, under a cost of service agreement. The Fuel Security Resource will

¹ Under ISO-NE’s proposed criteria for holding resources for fuel security, only existing capacity resources submitting a Retirement De-List Bid would be eligible to be held.

be entitled to compensation pursuant to Section III.13.2.5.2.5.1 of Market Rule 1 and therefore will be indifferent to the ARA clearing prices.

II. Necessary Tariff Changes

This approach will require changes to certain provisions of the Tariff, Market Rule 1, including, but not limited to the following (Tariff changes in red below):

1. **Definition of a Fuel Security Resource**:. The Tariff will require the addition of a definition for a Fuel Security Resource and for ISO-NE to have the authority to retain a Fuel Security Resource. NEPGA asks for this Annual Reconfiguration Auction approach to apply to all Fuel Security Resources, including any permitted beyond the immediate request for the Mystic Units, and NEPGA uses that term generically below to refer to any resource (and the eventual Tariff definition) held for fuel security.
2. **Supply Offers (in Reconfiguration Auctions)**: The Tariff prohibits Retirement De-List Bids that cleared in the FCA to participate in an ARA. The designation by ISO-NE of a Fuel Security Resource should include an obligation that a Fuel Security Resource with a cleared Retirement De-List Bid offer as supply in each of the three ARAs associated with the FCA in which the Fuel Security Resource's Retirement De-List Bid cleared, in the quantity amount of one third of its Forward Capacity Auction Qualified Capacity in each ARA at \$0/kW-month. The Tariff may be amended as follows:

III.13.4.2.1. Supply Offers. Submission of supply offers in reconfiguration auctions shall be governed by this Section III.13.4.2.1. All supply offers in reconfiguration auctions shall be submitted by the Project Sponsor or Lead Market Participant, and shall specify the resource, the amount of capacity offered in MW, and the price, in dollars per kW/month. In no case may capacity associated with a Retirement De-List Bid or a Permanent De-List Bid that cleared in the Forward Capacity Auction, or a demand bid that cleared in a substitution auction, for a Capacity Commitment Period be offered in a reconfiguration auction for that, or any subsequent, Capacity Commitment Period, or any portion thereof, **except for those offered and cleared by a Fuel Security Resource. The MWs associated with a cleared Retirement De-List Bid from a Fuel Security Resource shall be offered as supply in each of the three Annual Reconfiguration Auctions associated with the Forward Capacity Auction, in each case in an amount equal to one-third of the Fuel Security Resource's FCA Qualified Capacity at \$0/kW-month.** In no case may capacity associated with an Export Bid or an Administrative Export De-List Bid that cleared in the Forward Capacity Auction for a Capacity Commitment Period be offered in a reconfiguration auction for that Capacity Commitment Period, or any portion thereof.

3. **Retirement and Permanent De-Listing of Resources**: A Retirement De-List Bid that clears the Forward Capacity Auction results in the resource forfeiting its capacity and energy interconnection rights. The tariff must be amended to provide that if a Retirement De-List Bid from a Fuel Security Resource clears the FCA, it does not retire and it is

automatically entered into the each of the ARAs, in a quantity as explained above, as supply at \$0/kW-month. Subsection (a)(i) may be amended as follows:

III.13.2.5.2.5.3. Retirement and Permanent De-Listing of Resources.

(a)(i) Except for a Retirement De-List Bid submitted by a resource designated by ISO-NE as a Fuel Security Resource pursuant to Section III.13.x.x.x, a A_resource, or portion thereof, will be retired coincident with the commencement of the Capacity Commitment Period for which the Retirement De-List Bid was submitted, or earlier as described in Section III.13.2.5.2.5.3(a)(ii), if the resource: submitted a Retirement De-List Bid that was not included in the Forward Capacity Auction pursuant to Section III.13.1.2.3.1.5(d); elected to retire pursuant to Section III.13.1.2.4.1(a) and was not retained for reliability pursuant to Section III.13.1.2.3.1.5.1; was subject to conditional treatment pursuant to Section III.13.1.2.4.1(b) for a Retirement De-List Bid with a submitted price at or above the Capacity Clearing Price and was not retained for reliability pursuant to Section III.13.1.2.3.1.5.1; had a Commission-approved Retirement De-List Bid clear in the Forward Capacity Auction; or, for a resource, or portion thereof, that submitted a Permanent De-List Bid, elected to retire pursuant to Section III.13.1.2.4.1(a) and was not retained for reliability pursuant to Section III.13.1.2.3.1.5.1. In the case of a Retirement De-List Bid rejected for reliability, if the reliability need that resulted in the rejection for reliability is met, the resource, or portion thereof, will be retired coincident with the end of Capacity Supply Obligation (or earlier as described in Section III.13.2.5.2.5.3(a)(ii)) unless the Commission directs that the obligation to retire be removed or the retirement date extended as part of an Incremental Cost of Reliability Service filing made pursuant to Section III.13.2.5.2.5.2. The interconnection rights, or relevant portion thereof, for the resource will terminate and the status of the resource, or portion thereof, will be converted to retired on the date of retirement, consistent with the provisions of Schedules 22 and 23 of the OATT.

Exhibit 3

COMPLAINT REQUESTING FAST TRACK PROCESSING

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

New England Power Generators Association,)	
)	
)	
Complainant)	
)	Docket No. EL18-____-000
v.)	
)	
ISO New England Inc.)	
)	
Respondent.)	

NOTICE OF COMPLAINT

()

Take notice that on May 23, 2018, the New England Power Generators Association (“NEPGA”) filed a formal complaint against ISO New England Inc. pursuant to section 206 of the Federal Power Act, 16 U.S.C. § 824e and Rule 206 of the Federal Energy Regulatory Commission’s Rules of Practice and Procedure, 18 C.F.R. § 385.206, alleging that generation resources held for fuel security in New England should not be offered as price-takers in the Forward Capacity Auctions. NEPGA further requests Fast Track processing of its complaint pursuant to 18 C.F.R. § 385.206(h).

NEPGA certifies that copies of the complaint were served on the contacts for ISO New England Inc. as listed on the Commission’s list of Corporate Officials.

Any person desiring to intervene or to protest this filing must file in accordance with Rules 211 and 214 of the Commission’s Rules of Practice and Procedure (18 CFR 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a notice of intervention or motion to intervene, as appropriate. The Respondent’s answer and all interventions, or protests must be filed on or before the comment date. The Respondent’s answer, motions to intervene, and protests must be served on the Complainants.

The Commission encourages electronic submission of protests and interventions in lieu of paper using the “eFiling” link at <http://www.ferc.gov>. Persons unable to file electronically should submit an original and 5 copies of the protest or intervention to the Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426.

This filing is accessible on-line at <http://www.ferc.gov>, using the “eLibrary” link and

is available for review in the Commission's Public Reference Room in Washington, DC. There is an "eSubscription" link on the web site that enables subscribers to receive email notification when a document is added to a subscribed docket(s). For assistance with any FERC Online service, please email FERCOnlineSupport@ferc.gov, or call (866) 208-3676 (toll free). For TTY, call (202) 502-8659.

Comment Date: 5:00 pm Eastern Time on (insert date).

Kimberly D. Bose

Secretary

