PUBLIC VERSION – PRIVILEGED INFORMATION REMOVED

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc.	**)**	**Docket No. ER16-551-000**

PROTEST OF THE NEW ENGLAND POWER GENERATORS ASSOCIATION, INC.

Pursuant to Rule 211 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission (the "Commission"),[1] the New England Power Generators Association, Inc. ("NEPGA")[2] hereby protests the December 17, 2015 filing[3] in the above-captioned proceeding[4] by ISO New England Inc. ("ISO-NE")[5] of proposed revisions to provisions of the Forward Capacity Market ("FCM") rules relating to resource retirement. As discussed below and in the affidavit of Seabron Adamson, a Vice President of Charles River Associates, provided as Attachment A hereto (the "Adamson Affidavit"), ISO-NE's proposal regarding priced retirement bids is not just and reasonable. Indeed, ISO-NE's proposal can be expected to result in precisely the sort of market distortion it is supposed to prevent, and would thus be worse than its existing Non-Price Retirement Request ("NPRR") mechanism.

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1 18 C.F.R. § 385.211 (2015).

2 NEPGA, a non-profit entity duly organized and existing under the laws of the Commonwealth of Massachusetts, is a trade organization that advocates for the business interests of non-utility electric power generators in New England. NEPGA's member companies represent approximately 26,000 MW of electrical generating capacity throughout the New England region. The positions set forth in this filing represent the position of NEPGA as an organization, but not necessarily the views of any particular member with respect to any issue.

3 Forward Capacity Market Retirement Reforms, Docket No. ER16-551-000 (filed Dec. 17, 2016) (the "December 17 Filing").

4 NEPGA has separately moved to intervene in this proceeding. *See* (doc-less) Motion to Intervene of the New England Power Generators Association, Inc., Docket No. ER16-551-000 (filed Dec. 18, 2015).

5 Capitalized terms not otherwise defined herein have the meaning set forth in ISO-NE's Transmission, Markets and Services Tariff (the "Tariff").

I.

BACKGROUND

A. ISO-NE's Existing Retirement Rules

As the December 17 Filing explains, the FCM rules currently permit a supplier to submit a Static De-List Bid, specifying a price below which the supplier does not wish to provide capacity from its resource for a specific year, or a Permanent De-List Bid, specifying a price below which the resource will permanently exit the capacity market.[6] Alternatively, a supplier can submit an NPRR, which allows it to permanently retire the resource regardless of the clearing price in the relevant Forward Capacity Auction ("FCA").[7] Under the currently-effective rules, Static De-List Bids and Permanent De-List Bids must be submitted in June of the year preceding the Forward Capacity Auction ("FCA"), *i.e.*, eight months in advance of the FCA, and NPRRs can be submitted as late as October, 120 days prior to the FCA.[8]

B. The December 17 Filing

In the December 17 Filing, ISO-NE proposes to eliminate the NPRR option and instead to require that all suppliers seeking to remove a resource from the FCM submit either (1) a priced Permanent De-List Bid, which, if it clears, would permanently remove the resource from the capacity market; or (2) a priced Retirement De-List Bid, which, if it clears, would permanently remove the resource from all markets (together, referred to herein as "Exit Bids").[9] Permanent De-List Bids and Retirement De-List Bids would have to be submitted in March of the year preceding the FCA, and ISO-NE has also proposed corresponding modifications to

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6 *See* December 17 Filing, Transmittal Letter at 4.

7 *See id.*

8 *See id.*

9 *See id.* at 6.

certain other deadlines leading up to each FCA.[10] Once a capacity supplier has submitted an Exit Bid for a resource, it will be required to resubmit an Exit Bid for that resource in subsequent years.[11]

Upon the submission of an Exit Bid, the IMM will review the bids and issue Retirement Determination Notifications ("RDNs") specifying an IMM-determined price for each bid within 90 days of the bid submission.[12] Upon receiving its RDN, the supplier will have 10 days to decide whether it will (1) continue to participate in the FCA at the Commission-approved bid price (discussed below); (2) unconditionally retire its resource; or (3) conditionally retire its resource, in which case the resource will receive a Capacity Supply Obligation ("CSO") only if the FCA clearing price is greater than the supplier's own Exit Bid (even the clearing price is lower than the IMM-determined bid price).[13] After suppliers have made their decisions, the IMM will file, pursuant to Section 205 of the Federal Power Act (the "FPA"),[14] "the results of the [IMM]'s retirement bid review and supporting documentation (including the information submitted by the capacity supplier)."[15] ISO-NE contemplates that "[s]uppliers and other affected parties will have the opportunity to protest the [IMM]'s determinations and provide additional

10 *See id.* at 9-10.

11 *Id.* at 7, n.12. In the event of a change in circumstances affecting a given resource, a supplier could request that the Internal Market Monitor (the "IMM") discontinue the persistence requirement as to that resource. *See also id.* at 16, Attachment, Prepared Testimony of Jeffrey D. McDonald on Behalf of ISO New England Inc. (the "McDonald Testimony") (describing how the IMM will determine whether the persistence requirement should be discontinued).

12 *See* December 17 Filing, Transmittal Letter at 10-11.

13 *See id.* at 11-12.

14 16 U.S.C. § 824d (2012).

15 December 17 Filing, Transmittal Letter at 12.

information,"[16] after which the Commission will approve or revise the IMM-calculated bid.[17]

The Commission-approved bid will be used in three circumstances. First, the Commission-approved bids will be used for suppliers that have elected to continue to participate in the FCA.[18] Second, in circumstances where a supplier has elected to unconditionally retire a resource and is determined by the IMM to fail the portfolio benefits test set forth in the newly proposed Section III.A.24 of the Tariff,[19] ISO-NE will enter a Proxy De-List Bid (set equal to the Commission-approved bid) for the resource in the FCA, despite the fact that the resource will not be eligible to take on a CSO. To the extent that Proxy De-List Bid does not clear (*i.e.*, the Proxy De-List Bid is equal to or below the clearing price) and the retiring resource assumes a CSO, ISO-NE will re-run the clearing algorithm, which will procure additional capacity to replace the retiring resource at prices that may be different from those resulting from the first run of the algorithm.[20] Finally, Proxy De-List Bids will be used in cases where suppliers have chosen to conditionally retire. In such cases, the Proxy De-List Bid will be entered into the FCA, but the supplier's resource will not receive a CSO unless the clearing price is at or above the bid that the supplier originally submitted. ISO-NE describes this conditional Exit Bid option as "providing a means for a resource to potentially receive a [CSO] if the actual capacity clearing price is greater

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16 *Id.*

17 *See id.* at 12-13.

18 *See id.* at 11-12.

19 ISO-NE describes the portfolio benefits test as

> comparing the estimated revenue that a capacity supplier would earn with and without the capacity of the retiring resource. If a supplier's expected revenue without the capacity of the retiring resource is greater than its revenues with the capacity of the retiring resource, then the supplier is determined to have a portfolio benefit and a proxy de-list bid is used for capacity associated with an unconditional retirement.

Id. at 9.

20 *See id.* at 14-15.

than the price that the supplier believed it needed."[21] If the auction clears at a price below the supplier's original Exit Bid price but higher than the Proxy De-List Bid price, ISO-NE will run the auction a second time to procure additional capacity to replace the megawatts of the retiring resource.

II.

PROTEST

NEPGA appreciates that the current deadline for resource retirement decisions presents concerns, and agrees that, in theory, properly-crafted rules allowing for priced retirement bids could be help market participants price their willingness to assume a CSO. Moreover, certain aspects of proposal set forth in the December 17 Filing could represent an improvement to ISO-NE's existing rules by, for example, broadening the types of costs that may be considered in Permanent De-List Bids. As discussed below, however, the December 17 Filing creates more problems than it solves because it will distort and suppress the price signals resulting from the FCM and result in unlawful discriminatory treatment of resources providing the same service. Accordingly, the December 17 Filing is not just and reasonable and should be rejected.

A. ISO-NE's Proposal Is Not Just And Reasonable

1. ISO-NE Has Not Adequately Justified The Elimination Of The NPRR Option Or Its Other Proposed Modifications

ISO-NE originally developed the NPRR option to address "stakeholder concerns that the de-list options above do not provide a non-price path for a unit that simply seeks to retire."[22] In proposing this option, ISO-NE explained that "[a]s units age and environmental standards

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[21] *Id.* at 12.

[22] *ISO New England Inc.*, 125 FERC ¶ 61,102 at P 11 (the "October 2008 Order"), *on clarification*, 125 FERC ¶ 61,324 (2008), *on reh'g*, 130 FERC ¶ 61,089 (2010).

change, resource owners may wish to exit the market unconditionally."[23] The Commission approved the proposal, finding that it "addresses toggling concerns by allowing cost-of-service payments only for capacity that seeks to leave the capacity market permanently yet is needed for reliability," and that "[t]his, in coordination with a security review of bilateral transfers of capacity, prevents gaming by holding these units needed for reliability to their committed capacity obligation."[24]

Nonetheless, ISO-NE now argues that the NPRR option should be eliminated and all retirement requests must specify a single price at which the resource would assume a CSO in order to prevent the exercise of market power, with Jeffrey D. McDonald, Vice President of Market Monitoring for ISO-NE, expressing the concern that "[t]he existing retirement process in New England does not include any mitigation measures to address the exercise of market power by way of the premature retirement of a resource . . . ."[25] Notably absent from the McDonald Testimony and the rest of the December 17 Filing, however, is any allegation, much less any evidence, that the NPRR option has ever been used to exercise market power. This is not surprising given that, as Mr. Adamson explains, "an uneconomic retirement is quite different even conceptually from some form of short-term withholding in terms of the costs to a capacity supplier."[26] In fact, "[b]y retiring a capacity unit early, a capacity supplier would be forfeiting all future capacity and energy revenues from that unit, and not just revenues for a single period," which "reduce[s] any economic incentive to undertake uneconomic retirements . . . ."[27]

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23 Tariff Revisions Relating to Resources Needed for Reliability in the Forward Capacity Market, Transmittal Letter at 20, Docket No. ER08-1209-000 (filed July 1, 2008).

24 October 2008 Order, 125 FERC ¶ 61,102 at P 47.

25 McDonald Testimony at 3.

26 Adamson Affidavit, ¶ 29.

27 *Id.*

Attempting to paper over this basic deficiency in ISO-NE's case, Mark G. Karl, Vice President of Market Development for ISO-NE, and Andrew G. Gillespie, Principal Analyst, state that NPPRs "are difficult to assess for reasonableness" and that it is thus "difficult to determine whether an NPRR is being used as a device to exercise market power by withholding capacity from the market."[28] As Mr. Adamson explains, it is certainly true that retirement pricing is an inherently complex and imprecise exercise.[29] But while that certainly has important implications for ISO-NE's proposal, it does not excuse ISO-NE from its obligation to support its proposal. ISO-NE's December 17 Filing fails to demonstrate that there is an actual or even a theoretical market power problem here that demands a remedy. Dr. McDonald's insinuation that a supplier might use an uneconomic retirement to benefit positions outside the capacity market[30] is particularly implausible given the high-profile nature of resource retirements and accompanying scrutiny and the threat of penalties that could be imposed on a supplier using an NPRR (or an Exit Bid) to withhold capacity, including massive monetary penalties,[31] and potentially even revocation of market-based rate authorization.[32]

Real-life experience with the NPRR mechanism bears out the point that uneconomic retirement is unlikely to be used to withhold. Over the course of the seven FCAs conducted with the NPRR option in place, hundreds of resources have exited or are scheduled to exit the market

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[28] December 17 Filing, Prepared Testimony of Mark G. Karl and Andrew G. Gillespie on behalf of ISO New England Inc. at 13 (the "Karl/Gillespie Testimony").

[29] *See* Adamson Affidavit, ¶ 22.

[30] *See* McDonald Testimony at 5.

[31] *See* Adamson Affidavit, ¶ 31. *See also, e.g.*, *Barclays Bank PLC*, 144 FERC ¶ 61,041 (2013) (assessing $435 million in civil penalties on an entity deemed to have manipulated Commission-jurisdictional markets in order to benefit financial positions).

[32] *See Enron Power Mktg., Inc.*, 103 FERC ¶ 61,343 (2003), *reh'g denied*, 106 FERC ¶ 61,024 (2004).

using this option,[33] and there has been just one instance in which accusations of withholding were leveled at a market participant in connection with an NPRR: the NPRR submitted in the FCA for the 2017/2018 Capacity Commitment Period ("FCA 8") with respect to certain units at the Brayton Point Power Station ("Brayton Point"). Although the non-public referral from ISO-NE and the IMM relating to FCA 8 did not address the subject of Brayton Point, the Commission's Office of Enforcement ("OE") nonetheless

> conducted a limited review of Brayton Point's bidding behavior to determine whether investigation of Brayton Point was warranted. Following the IMM's rejection of Brayton Point's Static De-List Bid, the owners of Brayton Point submitted a Non-Price Retirement Request, permanently removing Brayton Point from the FCM. OE staff found credible justifications for the owners' retirement decision and elected not to widen its investigation to include Brayton Point.[34]

The bottom line is that, in the one instance in which there were allegations of withholding through uneconomic retirement, those allegations were investigated and found not to warrant further investigation.

The vigor with which allegations relating to the Brayton Point retirement were urged before the Commission[35] also illustrates just how unrealistic it is to suppose that a genuine

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[33] *See* ISO New England Status of Non-Price Retirement Requests (Dec. 18, 2015), http://www.iso-ne.com/static-assets/documents/2014/09/npr_tracking_external.pdf.

[34] *ISO New England Inc.*, 148 FERC ¶ 61,201 at P 11 (2014). *See also, e.g.*, *ISO New England Inc.*, 153 FERC ¶ 61,378 at PP 15-16 (2015) (explaining that OE's "conclusion remains valid for FCA 9," and rejecting an intervenor's claims of market manipulation that were based on arguments that "'Brayton Point could be run profitably in the future'" because "even if true, [that] is not dispositive of whether market manipulation occurred or whether that issue should be set for hearing" (footnote omitted)); *ISO New England Inc.*, 153 FERC ¶ 61,096 at P 15 (2015) ("The Commission previously stated that there was no evidence that the owners of Brayton Point engaged in any inappropriate behavior in FCA 8, and [the intervenor] has provided no argument or evidence that causes us to reconsider this finding.").

[35] *See, e.g.*, Joint Motion to Intervene, Protest, and Requests for Evidentiary Hearing, Investigation and Waiver of Eastern Massachusetts Consumer-Owned Systems, Docket No. ER14-1409-000 (filed Apr. 14, 2014); Motion to Intervene and Protest of Public Citizen, Inc., Docket No. ER14-1409-000 (filed Apr. 14, 2014); Motion for Leave to Intervene and Protest and Objection of Connecticut Municipal Electric

attempt to withhold through uneconomic retirement would go undetected and unpunished. This high risk of detection, coupled with the massive penalties that could be imposed if a supplier were found to have engaged in withholding, would render any attempt to withhold nothing short of suicidal. Given the Commission's active pursuit of suppliers that have sought to withhold or otherwise exploit market rules, the proposals set forth in the December 17 Filing should be rejected as redundant, particularly given that such mechanisms would, as discussed below, have deleterious effects on the FCM.

2. ISO-NE's Proposed Uses of Commission-Approved And Proxy De-List Bids Will Result In The Over-Mitigation Of Resources and Undue Discrimination

The U.S. Court of Appeals for the District of Columbia Circuit (the "D.C. Circuit") has recognized that, to be just and reasonable, market power mitigation measures must "strik[e] a balance between, on the one hand, detecting and dampening exercises of market power and, on the other hand, allowing generators to charge prices that are high enough for them to recover their fixed costs."[36] The Commission has similarly recognized the dangers of over-mitigation,[37] and has, therefore, made clear that it will "approve only mitigation measures that address well-defined structural problems in the market."[38] That is precisely the problem here, as ISO-NE overzealously strives to fix a problem that, as discussed, has not been shown to exist.

Energy Cooperative And New Hampshire Electric Cooperative, Inc., Docket No. ER14-1409-000 (filed Apr. 14, 2014); Motion to Intervene and Protest of George Jepsen, Attorney General for the State of Connecticut, Docket No. ER14-1409-000 (filed Apr. 14, 2014); Motion to Intervene and Protest of Utility Workers Union of America Local 464, and Robert Clark, Docket No. ER14-1409-000 (filed Apr. 15, 2014).

[36] *Wisconsin Pub. Power, Inc. v. FERC*, 493 F.3d 239, 262-63 (D.C. Cir. 2007).

[37] *See, e.g.*, *PJM Interconnection, L.L.C.*, 143 FERC ¶ 61,090 at P 26 (2013), *on reh'g*, 153 FERC ¶ 61,066 (2015); *Midwest Indep. Sys. Operator, Inc.*, 111 FERC ¶ 61,043 at P 78, *on reh'g*, 112 FERC ¶ 61,086 (2005).

[38] *New England Power Pool*, 101 FERC ¶ 61,344 at P 28 (2002).

Notwithstanding ISO-NE's protestations to the contrary,[39] various features of its proposal would result in the over-mitigation and artificial suppression of FCA clearing prices, as well as unduly discriminatory pricing.

The December 17 Filing proposes that a supplier's Exit Bid will be replaced by the one calculated by the IMM and approved by the Commission in three circumstances. First, if the supplier takes no action after receiving its RDN, an offer will be entered into the FCA for its resource based on the Commission-approved Exit Bid.[40] Second, to the extent that a supplier chooses to conditionally retire, a Proxy De-List Bid will be entered "to ensure that the clearing price is not increased above competitive levels."[41] Finally, Proxy De-List Bids will also be entered for suppliers that have chosen to unconditionally retire a resource and that fail the portfolio benefits test.[42] ISO-NE has not shown that it is reasonable to distort competitive market outcomes by interfering with the bids submitted by suppliers in these circumstances.

As Mr. Adamson explains, ISO-NE's proposal reflects an apparent belief that "the IMM-determined and Commission-approved retirement bid price to be used by ISO-NE is the sole reasonable price."[43] As Mr. Adamson observes, however, it is simply erroneous to suggest that there is a single, reasonable Exit Bid price that can be calculated for each resource.[44] In reality, the process is inherently complex and imprecise. Indeed, in attempting to deflect attention from the absence of any evidence suggesting that the NPRR option has been used to withhold, Messrs. Karl and Gillespie effectively concede as much, asserting that NPRRs "are difficult to assess for

39 *See* McDonald Affidavit at 19-21.

40 *See* December 17 Filing, Transmittal Letter at 11-12.

41 *Id.* at 12.

42 *See id.*

43 Adamson Affidavit, ¶ 27.

44 *See id.*, ¶ 25.

reasonableness."[45] There is no reason to assume that the IMM is better, much less uniquely, positioned to make retirement bid determinations when compared to market participants whose businesses are based on these types of price forecasts.

Far from being a "precise and clinical" exercise, the real-life question of whether, and at what price, to exit is not one to which there is exactly one reasonable and knowable answer.[46] As an initial matter, and as discussed in the affidavits of William B. Berg, Vice President of Wholesale Market Development for Exelon Corporation (the "Berg Affidavit"), and Brad Kranz, NRG Energy, Inc.'s Vice President for Wholesale Regulatory Strategy Policy, provided in Attachments B and C, respectively, the exercise is difficult and highly complex and dependent upon forecasts about future market conditions and a number of plant-specific factors that are unlikely to be captured in a standardized formula. Moreover, Mr. Adamson explains that even with respect to the forecasts that are a major factor in the proposed retirement calculus, "[t]he IMM is not necessarily best placed to predict the future."[47] Mr. Adamson further explains that, unlike Static De-List Bids, which only cover a single year, "[r]etirement bids necessarily must cover multiple years, significantly increasing both the sensitivity of the results to future forecast parameters and the challenge of predicting those future parameters accurately."[48] For example, it can be exceedingly difficult to place a value on a resource that has a limited number of useful years left and that may require capital improvements, or to determine if the resource owner would be able to find a buyer or should deploy its capital elsewhere. This is precisely why suppliers make their retirement decisions based on the input of "staff with substantial

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45 Karl/Gillespie Testimony at 13.

46 Adamson Affidavit, ¶ 22.

47 *Id.*

48 *Id.*, ¶ 23.

commercial experience, often backed by teams of expert consultants, investment bankers, and consulting engineers."[49] As a result, "different market participants can and do come up with different estimates, and those estimates may all be perfectly reasonable," just as "a company selling a generation asset will typically receive a wide range of bids, and most, if not all, of those bids are likely to be reasonable . . . ."[50]

Ignoring these types of complexities, the December 17 Filing asks the Commission "to believe that the IMM can fulfill this role better than the market itself and can find the one, 'correct' answer."[51] As discussed in Section II.B below, ISO-NE's proposal to give itself Section 205 filing rights with respect to Exit Bids will mean that, even if the Exit Bids calculated by suppliers are based on forecasts and factors no less plausible than those considered by the IMM, the IMM-calculated bids will be the ones used in the FCA. That is, competitive market outcomes will be skewed because reasonable Exit Bids submitted by suppliers that actually have "skin in the game" will be replaced by lower, administratively-calculated bids.[52]

To make matters worse, the December 17 Filing contemplates that, under certain circumstances, ISO-NE would run its FCA clearing algorithm twice, with the vast majority of suppliers being paid the lower first-run clearing price and a lucky few receiving the higher second-run clearing price.[53] Specifically, ISO-NE would conduct this second run when an actual resource will be retired (either because the resource owner had elected to unconditionally retire or had submitted a conditional retirement bid that cleared), but the Proxy De-List Bid does not

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49 *Id.*, ¶ 22.

50 *Id.*

51 *Id.* (footnote omitted).

52 *See id.*, ¶ 26.

53 *See* December 17 Filing, Transmittal Letter at 14-15.

clear – *i.e.*, the proxy resource is deemed to have an associated CSO.[54] ISO-NE concedes that this approach is less than "ideal."[55] That is an understatement; this proposal will result in long-term harm to the FCM construct and is not just and reasonable.

Under the FCM construct, "market credibility" is critical because generators are required to "invest capital upfront against a future set of FCM revenues that are uncertain, and are substantially affected by future FCM rules and market behavior . . . ."[56] Mr. Adamson further explains that, for capacity prices to be credible in the future

> capacity market participants need to believe that suppliers not covering at least their risk-adjusted going-forward costs (and incremental capital expenditures required to continue operations) will exit the market, thus allowing capacity prices to rise to economically efficient levels and more efficient new entrants to prosper.[57]

The entry of a Proxy De-List Bid in the FCA will prevent capacity prices from accurately reflecting supplier's decision to retire.[58] This will mask the actual balance of supply and demand in the region and improperly suppress market clearing prices at the very moment in time when signals new entry are needed.[59]

Remarkably, Messrs. Karl and Gillespie appear to view this aspect of the ISO-NE proposal as a benefit, touting the fact that the use of a Proxy De-List Bid will completely "eliminate[] the impact of the retirement on the market clearing price by representing the

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54 *See* Karl/Gillespie Testimony at 32.

55 December 17 Filing, Transmittal Letter at 14.

56 Adamson Affidavit, ¶ 13.

57 *Id.*, ¶ 15.

58 *See id.* ¶¶ 15, 34-35.

59 *See, e.g.*, *ISO New England Inc.*, 142 FERC ¶ 61,107 at P 118 (2013) ("One of the goals of the FCM is to reveal those locations where capacity is required, and to allow prices to rise to the levels necessary to induce resources to locate and to remain in those locations."), *on reh'g*, 151 FERC ¶ 61,055 (2015).

resource's megawatt capacity and economic price in the auction."[60] But that is no benefit. The FCM was designed to "ensure both that existing generators are adequately compensated and that prices support new entry when additional capacity is needed."[61] If the FCM construct is to work as designed, each FCA must be permitted to convey accurate price signals to new and existing resources, including signals for needed new entry. This is not allowed to happen under ISO-NE's proposal, which masks the exit of resources, thereby suppressing prices.[62] Importantly, this improper price suppression is not cured by the proposed second run of the FCA, which will allow ISO-NE to procure additional capacity at potentially higher prices because, as the Commission has recognized, the majority of resources will clear in, and be relying on clearing prices from, the first run.[63] Indeed, ISO-NE's proposal to run the clearing mechanism again to procure additional capacity at a potentially higher price is akin to uplift payments that the Commission has recognized in its price formation proceeding will "undermine the market's ability to send actionable price signals" and raise concerns that "those resources are providing a service that should be priced in the market or opened to competition."[64] Moreover, new resources will be aware that they only have the ability to lock in their first year clearing price for six additional years under the ISO-NE Tariff,[65] and that they will be exposed to FCA clearing

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60 Karl/Gillespie Testimony at 24.

61 *Maine Pub. Utils. Comm'n v. FERC*, 520 F.3d 464, 473 (D.C. Cir. 2008) (citation omitted), *rev'd in part on other grounds*, *NRG Power Mktg. LLC v. Maine Pub. Utils. Comm'n*, 558 U.S. 165 (2010).

62 *See* Adamson Affidavit, ¶¶ 34-35.

63 *See Hudson Transmission Partners, LLC v. New York Indep. Sys. Operator, Inc.*, 145 FERC ¶ 61,156 at P 102 (2013) (recognizing that, in PJM Interconnection, L.L.C., "most capacity resources are committed in the [Base Residual Auction]," which is the corollary to ISO-NE's FCA), *on clarification*, 153 FERC ¶ 61,191 (2015).

64 *Price Formation in Energy and Ancillary Servs. Mkts. Operated by Reg'l Transmission Orgs. and Indep. Sys. Operators*, Notice at 3, Docket No. AD14-14-000 (June 19, 2014).

65 *See* Tariff, § III.13.1.1.2.2.4.

prices after the lock-in period. Accordingly, "overall market efficiency may be diminished," as new entrants "will rationally seek to price the risk of barriers to exit and future capacity price suppression into their entry bids."[66] This result is particularly objectionable in the absence of 100 percent certainty that the supplier's retirement decision was unreasonable and that the IMM-determined price was the sole reasonable price for retirement of that resource.

ISO-NE's proposal is also unduly preferential and discriminatory in violation of Section 205 of the FPA as it will result in similarly-situated resources being paid different prices for providing exactly the same product. The majority of resources will clear in the first run of the FCA and will receive one clearing price. At the same time, however, a smaller number of resources will clear in the second run and receive a presumably higher price. ISO-NE suggests the two-run approach will not be discriminatory, because "capacity acquired through the re-running of the clearing algorithm could be new or existing . . . ."[67] But that misses the point: ISO-NE is procuring the exactly same product in both the first and second runs but paying different prices.[68] Whether a new or existing resource gets the higher price from the second run, it is receiving preferential pricing for the same capacity product, the very definition of discriminatory pricing.

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66 Adamson Affidavit, ¶ 15.

67 December 17 Filing, Transmittal Letter at 15.

68 *See, e.g.*, *"Complex" Consol. Edison Co. N.Y., Inc. v. FERC*, 165 F.3d 992, 1012 (D.C. Cir. 1999) ("[T]o show undue discrimination, the petitioner must demonstrate that the two classes of customers are similarly situated for purposes of the rate." (citations omitted)); *Sebring Utils. Comm'n v. FERC*, 591 F.2d 1003, 1009 n.24 (5th Cir. 1979) (stating that the "essence of the principle" of the prohibition against undue discrimination "is that those who are similarly entitled must be treated equally"); *Transwestern Pipeline Co.*, Opinion No. 238-A, 36 FERC ¶ 61,175 at 61,433 (1986) ("Undue discrimination is in essence an unjustified difference in treatment of similarly situated customers." (citation omitted)), *aff'd sub nom. Transwestern Pipeline Co. v. FERC*, 820 F.2d 733 (5th Cir. 1987).

In the context of a winter reliability program proposed for the winter of 2013-2014, ISO-NE acknowledged that "a uniform clearing price is appropriate for 'market-based procurement with a uniform commodity-like product,'" but defended the disparate treatment of resources that resulted on the grounds that it was not "procuring a homogenous product, and not all resources are necessarily equal in the Program, which could cause ISO-NE to deviate from strict economic merit order when selecting bids."[69] In approving the program, the Commission similarly stressed that "[b]ecause the selected resources will provide resource-specific levels of reliability benefits they are not similarly situated and it is reasonable that they be paid different (non-uniform) prices as well."[70] By contrast, ISO-NE has not – and cannot – identify any difference between the product supplied by resources that will clear in the first run and those that will clear in the second run, other than that the latter will be paid more. ISO-NE will be procuring a homogenous product but paying a higher price to those resources that do not clear in the first run but do clear in the second run.

The proposed "two-run" process is inconsistent with a fundamental principal underlying the FCM and, indeed, virtually all Commission-approved independent system operator ("ISO") and regional transmission organization ("RTO") markets, in which all offers that clear are paid a single clearing price. The Commission has consistently found single-clearing price markets superior to "pay as bid" auctions, because the latter create the incentive for suppliers to guess the clearing price and to submit offers just below what they expect it to be, rather than offering at

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69 *ISO New England Inc.*, 144 FERC ¶ 61,204 at P 53 (2013), *on reh'g*, 147 FERC ¶ 61,026 (2014), *petition for review denied sub nom. TransCanada Power Mktg. Ltd. v. FERC*, 2015 WL 9287782 (D.C. Cir. 2015).

70 *Id.* at P 54.

marginal cost in order to maximize their chances of clearing.[71] In the same way, ISO-NE's "two-run" proposal could create incentives for suppliers with offer flexibility to guess the first-run clearing price and submit offers just above what they expect it to be, so that they will be able to participate in the second run.[72] Thus, Mr. Adamson states that "[t]he second run of the clearing algorithm, as advocated by ISO-NE, may introduce more problems than it solves . . . ."[73]

After conceding that its approach is not "ideal," ISO-NE states that "neither the ISO nor any stakeholders were able to identify an approach that would achieve this ideal during the stakeholder review process."[74] That is all well and good, but the absence of a perfect solution does not make ISO-NE's unjust, unreasonable and unduly discriminatory proposal lawful under Section 205 of the FPA.[75]

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[71] *See, e.g.*, *Midwest Indep. Transmission Sys. Operator, Inc.*, 102 FERC ¶ 61,196 at P 32 (uniform pricing "leads to the least cost dispatch and lowest possible prices while fairly compensating suppliers" as this would allow "the market operator to select the most efficient units that are not already committed under long-term contracts for dispatch, and produce a set of prices for each time and place that is transparent to all market participants," while the "pay as bid" method of pricing would mean that "suppliers would not have an incentive to bid their cost, rather they would all be expected to bid their estimate of the market clearing price," and "[i]t is likely that low cost suppliers would inevitably guess higher than high cost suppliers at times, resulting in inefficient dispatch"), *on clarification*, 102 FERC ¶ 61,338, *on reh'g*, 103 FERC ¶ 61,210 (2003); *New York Indep. Sys. Operator, Inc.*, 110 FERC ¶ 61,244 at n.76 ("If generators were paid only the price they bid, they would then try to guess at the market clearing price or else they would never receive more than their bid . . . . 'Clearly, if suppliers know that they are going to receive only what they bid, they will attempt to bid the market clearing price, a practice that introduces additional risks into the market.'" (citation omitted)), *on reh'g*, 113 FERC ¶ 61,155 (2005), *appeal denied sub nom. Consol. Edison Co. of N.Y., Inc. v. FERC*, 510 F.3d 333 (D.C. Cir. 2007).

[72] *See* Adamson Affidavit, ¶ 36.

[73] *Id*.

[74] December 17 Filing, Transmittal Letter at 15.

[75] *See* 16 U.S.C. § 824d(b) (2012) (prohibiting the Commission from approving any rates that would "make or grant any undue preference or advantage to any person or subject any person to any undue prejudice or disadvantage . . . ."). NEPGA notes that alternative approaches were offered by a number of NEPGA member companies in the stakeholder process that preceded ISO-NE's proposal. NEPGA takes no position on those alternative proposals.

B. ISO-NE And Its IMM Cannot Be Permitted To Usurp Sellers' Section 205 Filing Rights

As described above, ISO-NE's proposal contains numerous features that will result in improperly suppressed clearing prices. These concerns are heightened because under ISO-NE's proposal, a capacity supplier will submit its Exit Bid for review by the IMM, and ISO-NE "will file with the Commission pursuant to Section 205 of the [FPA] the results of the [IMM]'s [Exit Bid] review and supporting documentation (including the information submitted by the capacity supplier)."[76] The rates accepted by the Commission will then be used for resources that choose to continue to the FCA, and as the Proxy De-List Bids used for resources that choose the unconditional retirement and conditional retirement options. This proposal turns the filing scheme under the FPA on its head because it deprives suppliers of the ability to set their own Exit Bids.

The Commission and the courts have made clear that ISOs/RTOs cannot assume public utilities' rights to propose rate changes under Section 205 of the FPA. For example, the D.C. Circuit overturned a Commission order, where "[r]ather than permit unilateral filings by the individual utilities as provided in section 205, . . . only the ISO could propose changes in rate design . . . ."[77] The D.C. Circuit found that the Commission "cannot point to any statute giving it authority for its unprecedented decision to require the utility petitioners to cede rights expressly given to them in section 205 of the [FPA]."[78] Similarly, the Commission found that an ISO/RTO needed to revise its tariff to "allow generation . . . owners designated as [system support

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[76] December 17 Filing, Transmittal Letter at 12.

[77] *Atlantic City Elec. Co. v. FERC*, 295 F.3d 1, 7 (D.C. Cir. 2002) ("*Atlantic City*"), *enforced*, 329 F.3d 856 (D.C. Cir. 2003).

[78] *Id.* at 9.

resources] to file their own revenue requirement in order to protect that generation . . . owner's rights under FPA section 205."[79]

Notwithstanding this clear precedent, ISO-NE now proposes that it, rather than suppliers, will have Section 205 rights with respect to Exit Bids. Indeed, under ISO-NE's scheme, capacity suppliers will be asked to make their decisions on how they want to proceed – *i.e.*, to elect whether they want to proceed to the FCA using the Commission-approved bid, or to conditionally or unconditionally retire – ***before*** the Commission is able to make a final determination on the rates, meaning that retirement decisions will be dictated by the IMM's determinations.[80] Such suppliers will then merely "have the opportunity to ***protest*** the [IMM]'s determinations and provide additional information."[81] That is, suppliers will be placed in the strange position of having to intervene and submit protests regarding their own rates, rather than having the opportunity to propose those rates themselves before the Commission.

To be clear, the right to make a Section 205 filing is not merely symbolic. As the Courts of Appeal have made clear, the Commission may only reject a Section 205 filing that is not just and reasonable.[82] Moreover, as ISO-NE emphasizes in the December 17 Filing, the rate proposed in a Section 205 filing "'need not be the only reasonable methodology, or even the most accurate.'"[83] As a result, where the Commission is presented with two just and reasonable

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79 *Midcontinent Indep. Sys. Operator, Inc.*, 148 FERC ¶ 61,057 at P 92 (2014).

80 *See* December 17 Filing, Transmittal Letter at 12 (stating that ISO-NE would make its Section 205 filing with the Commission "[a]pproximately 10 days ***after*** suppliers have chosen how they would like to proceed after receiving their RDNs" (emphasis added)).

81 *Id.* (emphasis added). *See also* Karl/Gillespie Affidavit at 18 ("The participant can protest its IMM-approved price at the Commission . . . .").

82 *See, e.g.*, *Atlantic City*, 295 F.3d at 9 (the Commission "can reject [proposed rate changes] only if it finds that the changes proposed by the public utility are not 'just and reasonable.'" (citations omitted)).

83 December 17 Filing, Transmittal Letter at 3 (quoting *Oxy USA, Inc. v. FERC*, 64 F.3d 679, 692 (D.C. Cir. 1995)). *See also, e.g.*, *Petal Gas Storage, L.L.C. v. FERC*, 496 F.3d 695, 703 (D.C. Cir. 2007)

Exit Bids – one calculated by the supplier and the other calculated by the IMM – the Commission would be required to accept the IMM's bid simply because ISO-NE made the Section 205 filing. This would be the case even if, as discussed above, the supplier's bid were also just and reasonable or even superior to that calculated by the IMM. The result will be artificial price suppression, with an administratively-determined bid price being substituted for a truly competitive bid price. The upshot is that the proposed reallocation of Section 205 rights changes the question posed to the Commission in an important way: rather than assessing the reasonableness of the supplier's Exit Bid, the Commission will be assessing the reasonableness of the IMM's alternative Exit Bid.

At the end of the day, ISO-NE's proposal ignores the fundamental regulatory truths that "[c]ost itself is an inexact standard" and that setting rates, which is what the IMM would be doing in calculating ***the*** reasonable Exit Bid price, "is, of course, much less a science than an art."[84] It is presumably with these truths in mind that the Commission's inquiry in the Brayton Point case focused on whether there were "credible justifications" for the owner's retirement

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("FERC is not required to choose the best solution, only a reasonable one.") (citation omitted); *Entergy Servs., Inc.*, 116 FERC ¶ 61,275 at P 32 (2006) (a Section 205 rate need not "be perfect, or the most desirable way of doing things, it need only be just and reasonable") (footnote omitted), *on clarification*, 119 FERC ¶ 61,013 (2007); *Louisville Gas & Elec. Co.*, 114 FERC ¶ 61,282 at P 29 ("[T]he just and reasonable standard under the FPA is not so rigid as to limit rates to a 'best rate' or 'most efficient rate' standard. Rather, a range of alternative approaches often may be just and reasonable."), *on reh'g sub nom. E.ON U.S. LLC*, 116 FERC ¶ 61,020 (2006).

[84] *Alabama Elec. Coop., Inc. v. FERC*, 684 F.2d 20, 27 (D.C. Cir. 1982) (footnote omitted). *See also, e.g., Town of Norwood v. FERC*, 53 F.3d 377, 380 (D.C. Cir. 1995) (ratemaking relies on "admittedly imperfect future cost estimates"); *Illinois Cities of Bethany v. FERC*, 670 F.2d 187, 191 (D.C. Cir. 1981) ("ratemaking is an inexact science"); *Tenneco Oil Co. v. FERC*, 571 F.2d 834, 847 (5th Cir. 1978) ("National ratemaking is often an imprecise business."); *Tennessee Gas Pipeline Co.*, 49 FERC ¶ 61,392 at 62,423 (1989) ("The overriding principle supporting the Commission's selection of a rate of return on equity below the midpoint of the DCF zone of reasonableness is that ratemaking is as much an art as it is a science, and inherently a subject that turns on an exercise of judgment." (footnote omitted)),

decision,[85] and not whether the owner's analysis deviated by even the slightest increment from some divine mean. There is no basis for elevating the IMM's determinations over those of market participants, whose capital is at stake and who are in the business of making these types of determinations.

Separate and apart from these serious statutory and policy considerations, ISO-NE's proposal also raises certain logistical problems. As an initial matter, and as mentioned above, suppliers will be asked to make decisions regarding how they would like to proceed after receiving their RDNs but prior to the submittal of ISO-NE's Section 205 filing with the Commission. Thus, suppliers will have to make their retirement decisions with considerable uncertainty regarding the Commission's ultimate determination.

In addition, and as described above, the use of Proxy De-List Bids will potentially "have a significant impact on the capacity suppliers that participate in the . . . auctions as well as customers who pay the price that the auction sets for capacity."[86] The Commission has recognized that, in similar circumstances, interested parties must have the opportunity to "participate meaningfully" in proceedings challenging the IMM's determinations.[87] ISO-NE's proposal provides for no such meaningful opportunity because, under proposed Section III.13.8.1(a), ISO-NE "will file the following information confidentially: the determinations made by the [IMM] with respect to each Permanent De-List Bid and Retirement De-List Bid, and supporting documentation for each such determination."[88] Accordingly, it does not appear that

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85 *ISO-NE*, 148 FERC ¶ 61,201 at P 11.

86 *Astoria Generating Co., L.P. v. New York Indep. Sys. Operator, Inc.*, 136 FERC ¶ 61,155 at P 23 (2011).

87 *Id.* at P 22 (citation omitted).

88 December 17 Filing, Proposed Tariff, § III.13.8.1(a).

interested parties will have access to the information used to by the IMM to calculate Exit Bids. Moreover, it is unclear if other market participants would have the inside information necessary to contest the unreasonableness of the IMM's determinations in situations where, for example, a supplier has chosen to simply cut its losses by choosing to retire its resource.

III.

REQUEST FOR CONFIDENTIAL TREATMENT

Pursuant to Section 388.112 of the Commission's regulations,[89] NEPGA requests privileged treatment of the Berg Affidavit provided as Attachment B hereto, which includes information the evaluation process Exelon Generation Company, LLC ("ExGen") undertakes in determining whether resources are economic and should be retired. This information is competitively sensitive and would be exempt from disclosure under the Freedom of Information Act.[90] Public disclosure of information regarding how Exelon evaluates potential resource retirement would result in competitive harm to ExGen.

In accordance with Section 388.112 of the Commission's regulations,[91] NEPGA has provided, in Attachment D, a proposed protective order pursuant to which other parties will have access to the non-public materials. The proposed protective order is a modified version of the Commission's model protective order, which creates a new class of protected materials, "Highly Sensitive Protected Materials," and is substantively identical to protective orders used in other Commission proceedings.[92]

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89 18 C.F.R. § 388.112 (2015).

90 5 U.S.C. § 552 (2012).

91 18 C.F.R. § 388.112 (2015).

92 *See, e.g., Astoria Generating Co., L.P. v. New York Indep. Sys. Operator, Inc.*, 136 FERC ¶ 61,155 (2011) ("*Astoria Generating*"). The proposed protective order differs from that adopted in

NEPGA will promptly provide the non-public version of this filing to eligible "Reviewing Representatives" (as defined in paragraph 3(d) of the proposed protective order) of ISO-NE or any person who has filed a motion to intervene or a notice of intervention after receiving a written request that includes executed non-disclosure certificates for each such Reviewing Representative and, in the case of persons other than ISO-NE, a copy of the motion to intervene or notice of intervention. Such written requests should be directed to: Stephanie Lim (sslim@kslaw). Because all of the Protected Materials submitted as part of this filing are Highly Sensitive Protected Materials, the non-public version of this filing will only be provided to individuals who are eligible Reviewing Representatives under paragraph 3(d)(2) of the proposed protective order.[93]

Astoria Generating in three respects. First, it expands the scope of persons eligible to be "Reviewing Representatives" with respect to Highly Sensitive Protected Materials to include employees of ISO-NE and the External Market Monitor. Second, the paragraphs have been renumbered to track more closely the numbering of the Commission's Model Protective Order. Third, the proposed protective order includes a separate form of non-disclosure agreement for "Competitive Duty Personnel," who would not have access to Highly Sensitive Protected Materials, in order to minimize the risk of confusion about which individuals are entitled to see which materials. NEPGA has also added a new defined term "Non-Disclosure Certificate for Competitive Duty Personnel" in paragraph 3(c)(2) of the proposed protective order and incorporated this new defined term into paragraph 9(a) of the proposed protective order.

[93] NEPGA will provide the non-public version of this filing to inside employees of non-governmental entities other than ISO-NE and its External Market Monitor pursuant to paragraph 3(d)(2)(G) of the proposed protective order as mutually agreed by the requesting entity and NEPGA. Requests to designate inside employees as Reviewing Representatives pursuant to paragraph 3(d)(2)(G) should be made by e-mail to the individual identified above and should include an executed non-disclosure certificate and the following information:

(1) The name and e-mail address of the individual;

(2) The name of the party requesting the designation;

(3) The employer of the individual;

(4) The individual's title and a brief description of the individual's job description and responsibilities; and

(5) Whether the individual is directly involved in, or has direct or supervisory responsibilities over, the purchase, sale, or marketing of electricity (including transmission service) at retail or wholesale, the negotiation or development of participation or cost-sharing arrangements for transmission or generation facilities, or other activities or transactions of a type with respect to

Notwithstanding the proposed Protective Order, NEPGA wishes to make clear that the non-public materials, including those designated as Highly Sensitive Protected Materials, should be treated as privileged materials reviewable by Commission Staff.

The non-public materials submitted herewith are all Highly Sensitive Protected Materials not available for review by Competitive Duty Personnel, and are marked "**CONTAINS PRIVILEGED AND CONFIDENTIAL INFORMATION AND HIGHLY SENSITIVE PROTECTED MATERIALS**" and "**DO NOT RELEASE**."

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which the disclosure of Highly Sensitive Protected Materials may present an unreasonable risk of harm.

IV.

CONCLUSION

For the reasons set forth herein, NEPGA respectfully requests that the Commission reject, or condition its acceptance of, the December 17 Filing as proposed herein.

Respectfully submitted,

NEW ENGLAND POWER GENERATORS ASSOCIATION, INC.

By: */s/*

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On behalf of the **New England Power Generators Association, Inc.**

Dated: January 11, 2016

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document on each person designated on the official service list compiled by the Secretary of the Federal Energy Regulatory Commission in this proceeding.

Dated at Washington D.C., this 11th day of January, 2016.

/s/
Stephanie S. Lim

Attachment A

The Adamson Affidavit

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc.	)	**Docket No. ER16-551-000**
	)	

Affidavit of Seabron Adamson
In Support of Protest of the New England Power Generators Association

Introduction

1. My name is Seabron Adamson. I am a Vice President with the Energy Practice of Charles River Associates ("CRA"). My business address is 200 Clarendon Street, Boston, MA 02116.

2. I have more than 20 years of consulting experience in the analysis of electric power and natural gas markets, in the United States, Canada, the United Kingdom and other countries. I have been active in market design, commercial and regulatory issues in most of the U.S. markets, including the ISO New England ("ISO-NE") market. I have advised a range of clients over a period of many years on generation investment, acquisition and regulatory issues associated with the ISO-NE market. I have also prepared written testimony regarding the ISO-NE market design and its development before the Federal Energy Regulatory Commission ("FERC" or "Commission"). Most recently in New England, in 2013, I provided written testimony (jointly with Richard D. Tabors) regarding gas-electric coordination issues in New England.[1]

3. I have analyzed capacity markets in ISO-NE and other US jurisdictions with respect to investments, regulatory and policy issues and rules development. I also have acted as

[1] Prepared Testimony of Richard D. Tabors and Seabron C. Adamson on behalf of the New England Power Pool, Docket ER13-895-000, February 28, 2013.

advisor to the Department of Energy and Climate Change of the British government on the development of a capacity market mechanism in the United Kingdom.

4. In addition to my consulting work and other interests, I am an adjunct faculty member of the A.B. Freeman School of Business at Tulane University, and a research associate of the Tulane Energy Institute. In this role, I have taught classes on energy trading, risk and portfolio management. I have also published articles on power markets in academic journals and co-authored a chapter in a recent book on financial transmission rights markets.

5. I received B.S. and M.S. degrees in Physics and Applied Physics, respectively, from Georgia Tech. I received an S.M. degree in Technology and Policy (with an energy focus) from M.I.T. in 1992. I later received an M.A. degree in economics from Boston University. A summary of my background and relevant experience is provided in Exhibit SA-1.

The ISO NE Filing and the Retirement Reforms

6. On December 17, 2015 ISO-NE filed a package of proposed changes to the Forward Capacity Market ("FCM") with the Commission relating to certain rules associated with capacity resource retirements. ISO-NE, in its filing, refers to these proposed changes as the "Retirement Reforms". For simplicity, I will use this same term in referring to the package of ISO-NE proposals. The December 15 filing by ISO-NE included the prepared testimony of Mark G. Karl and Andrew G. Gillespie of the Market Development group within ISO-NE ("Karl-Gillespie Testimony") and the prepared testimony of Jeffrey D. McDonald, Vice President of Market Monitoring for ISO-NE (the "McDonald Testimony").

7. The proposed Retirement Reforms include a wide range of measures, including measures designed to address what ISO-NE and its Internal Market Monitor ("IMM") describe as the opportunity to physically or economically withhold capacity from the FCM. These include changes to the FCM auction schedule, providing for the use of priced de-list bids for potentially retiring units, and creating new rules associated with proxy bids for retiring units.

8. Under current FCM rules, an existing capacity resource considering exit from the FCM has two basic options: priced exit or unconditional retirement through the use of a Non-Price Retirement Request ("NPRR"). Under the priced exit option, the supplier can specify the price below which it does not wish to supply capacity, either for a single year (under a Static De-List Bid) or to permanently exit the FCM (under a Permanent De-List Bid). Under an NPRR, no price is associated with the retirement in the Forward Capacity

Auction ("FCA"), and ISO-NE must review the reliability need for the retiring resource, but not its costs.[2]

9. Under the proposed Retirement Reforms, the NPRR option is eliminated, and potentially retiring resources have three options available to them. All three options now include a price, used in different ways. First, the resource may continue into the FCA at the price determined by the IMM (an "IMM-approved Retirement De-List Bid") and subject to approval by the Commission. Having accepted the priced retirement path, the participant agrees to accept the Commission-approved price.[3] Second, the capacity supplier may elect to unconditionally retire the resource. Under this option, the IMM applies a market power test called the Portfolio Benefit Test. If the IMM determines there is no portfolio benefit, then the unit is retired with no further action. If the resource fails the Portfolio Benefit Test, ISO-NE will use a proxy bid equal to the IMM-approved Retirement De-List Bid that has been reviewed and accepted by the Commission in the FCA even though the resource owner has elected to retire the unit unconditionally. Since the unit will retire and not accept a Capacity Supply Obligation ("CSO"), ISO-NE proposes to acquire additional capacity if needed in a re-run of the clearing mechanism. Third, a capacity supplier may choose to conditionally retire or de-list a resource. Under this third option, a resource is retired or permanently de-listed if the auction clears below its submitted price and the proxy bid, with no further action. If the auction clears above the participant's submitted price and the proxy bid price, the unit receives a CSO. If the auction clears between the submitted price and the proxy bid, the unit is retired. In this case, however, the proxy bid may be used in setting prices in the FCA. In this case, as in the second option, ISO-NE proposes to acquire additional resources as needed in a re-run of the clearing algorithm.

10. I have been asked by counsel for the New England Power Generators Association ("NEPGA") to provide an economic critique of some of the proposals submitted by ISO-NE. My testimony focuses on a subset of the proposed Retirement Reforms. These are: (1) the determination of retirement bid proxy prices by the IMM group within ISO-NE, and related issues of regulation; (2) existing controls for market power in the FCM; and (3) ISO-NE's proposal for the potential use of proxy bids and a subsequent second potential re-running of the clearing algorithm in some cases under the Unconditional Retirement and Conditional Retirement options. This third aspect of the Retirement Reforms, which in my view creates the potential for price suppression and discrimination in the FCM, is the primary focus of my testimony.

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2 ISO NE Filing Transmittal Letter at page 4.

3 Karl-Gillespie Testimony at page 18.

11. Before I address each of these aspects, I first describe some features of the FCM which are critical for understanding the Retirement Reforms and the role that retirements play in ensuring that capacity market outcomes are equitable and credible. This is the topic of the next major section of my testimony.

Characteristics of the FCM and Role of Retirements in Capacity Markets

12. The ISO-NE FCM, like other similar capacity markets, allows resources to assume and receive payment for a year-long CSO. There is no permanent commitment by ISO-NE to pay existing capacity resources for more than a single annual period in the FCM, and each subsequent year is settled independently at the then prevailing capacity price. In recent years ISO-NE has implemented a "two-settlement" design for the FCM, in which a resource is paid a Capacity Base Payment and a separate Capacity Performance Payment. The latter payment is determined on a resource-specific basis, measuring performance of the unit in providing energy and reserves at the time of scarcity in the relevant Capacity Commitment Period.

13. Providing generating capacity, of course, involves large sunk costs. Generating capacity cannot typically be moved, and requires large and specialized capital expenditures without alternative economic uses. In short, a generator must invest capital upfront against a future set of FCM revenues that are uncertain, and that are substantially affected by future FCM rules and market behavior (as well as exposure under the second settlement in the "two-settlement" design). Market credibility is therefore critical.

14. By moving the capacity delivery period three years into the future, ISO-NE removed a significant barrier to entry to the FCM, as a new plant (as yet unconstructed) would be able to enter the auction and take on a CSO. Economists are generally in favor of low barriers to entry in markets, a*s* these make markets more competitive, and increase the scope for efficient entry.

15. Less recognized, but also important, is the role of low *barriers to exit*. In order for capacity prices to be credible in the future, capacity market participants need to believe that suppliers not covering at least their risk-adjusted going-forward costs (and incremental capital expenditures required to continue operations) will exit the market, thus allowing capacity prices to rise to economically efficient levels and more efficient new entrants to prosper. If inefficient units are not allowed to leave, or if capacity prices are somehow kept below this level, overall market efficiency may be diminished. Where new entrants view exit barriers or capacity price suppression as possible, they will rationally seek to price the risk of barriers to exit and future capacity price suppression into their entry bids. This will tend to raise capacity prices when new capacity is needed, even if future prices (if there is a capacity surplus) may be reduced for some period through exit barriers.

16. The New England FCM is cleared through a descending clock auction in which all required capacity is typically purchased at the clearing price. Even with a sloped demand curve, this is a large amount of capacity. As ISO-NE witnesses Karl and Gillespie point out, even small changes in clearing price outcomes involve large amounts of money. These ISO-NE witnesses show in various hypothetical examples how reducing retirement bids to IMM-determined levels can reduce capacity prices, which when multiplied by the total acquired capacity implies large transfers. A $1/kW-month reduction in capacity prices, for example, is said to save almost $400 million per year.[4]

17. Given the large volumes acquired and the shape of the demand curve, much of the change in outcome represents a shift between consumer and producer surplus, with relatively little impact on total welfare. This does not make such shifts unimportant. The important point, however, is not that a relatively small reduction in capacity prices will generate substantial savings, but that even small shifts in prices at the margin, in either direction, have potentially large impacts on consumers and suppliers, and that the dollar magnitudes are important to consumers and suppliers.

18. The risks associated with capacity price shifts go both ways. ISO-NE's witnesses highlight the risk that the use of market power (by economic or physical withholding of capacity into the FCM) could be used to raise capacity prices. However, if ISO-NE's market rules result in prices that are artificially suppressed, then a large transfer of value from suppliers to capacity buyers can also be created, as existing generators cannot simply pick up their assets and leave the region. The challenge is to create capacity market outcomes which prevent the undue use of market power while not suppressing capacity market prices and undermining the long-term effectiveness of the capacity market.

Setting retirement prices will not be simple or uncontroversial

19. ISO-NE states that to prevent the retirement of economic capacity resources, it should be able to mitigate retirement bids in some circumstances in the FCA for potentially retiring units. It also seeks to create proxy bids for retirement prices under the unconditional retirement and conditional retirement options and to use these bids in some circumstances for setting capacity prices.

20. Under the Retirement Reforms, all resources seeking to retire (whether through a priced offer or unconditionally) must submit a Retirement De-List Bid price with supporting financial data, followed by a review by the IMM group. If, in the IMM's opinion, any of the costs or assumptions forming the basis of the Retirement De-List Bid are

[4] Karl-Gillespie Testimony at page 17.

"unreasonable," the IMM will substitute its judgment for that of the market participant and create its own Retirement De-List Bid price for the resource based on the IMM's costs and assumptions. The IMM will then file its price with the Commission under Section 205 of the Federal Power Act. Dr. McDonald states in his testimony that the capacity supplier will have the opportunity to intervene in the Commission review, and that a "just and reasonable competitive offer" will be used.[5] As discussed below, the problem with this arrangement is that it assumes that there is a single, calculable "just and reasonable competitive offer" for a resource that may exit the market, and thus substituting a Commission-approved bid price for the market participant's bid price will not artificially suppress price. As discussed below, however, this assumption is incorrect.

21. Dr. McDonald states that the IMM will use a "sound financial model and a robust process" for assessing retirement prices and determining proxy bids.[6] He later describes the discounted cash flow ("DCF") model in more detail, noting that it uses assumptions related to net operating profit, expected capacity market revenues, expected capital expenditures ("capex') and terminal value, and a risk-adjusted discount rate.[7] The Retirement De-List Bid is calculated from expected revenues and costs as the price necessary to break even in expectation (based on assumed prices, revenues and costs), using the risk adjusted discount rate.

22. The McDonald testimony gives the impression that this is a precise and clinical exercise; it is not. To determine its recommended retirement bids and proxy bids, the IMM must forecast the range of future energy and capacity prices, evaluate future plant capex, and determine the appropriate discount rate.[8] The IMM is not necessarily best placed to predict the future. I note that these are in fact the exact same determinations that investors and traders make in valuing generation assets, pricing bilateral contracts, and other longer-term market transactions. To support these activities, market participants employ staff with substantial commercial experience, often backed by teams of expert consultants, investment bankers, and consulting engineers. Even then, the resulting analyses in my experience are typically qualified merely as estimates, most often with a range of estimates spanning multiple scenarios. Actual unit earnings and outcomes are often quite different due to unexpected market changes. As one would expect, different market participants can and do come up with different estimates, and those estimates may

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5 McDonald Testimony at page 7.

6 McDonald Testimony at page 7.

7 McDonald Testimony at page 23.

8 I note that Dr. McDonald provides no indication of how the IMM plans to determine an appropriate risk-weighted discount rate, other than indicating that it will be based on a weighted average of debt and equity (page 24). In general, determining an appropriate weighted cost of capital for a specific risk is neither simple nor uncontroversial.

all be perfectly reasonable.[9] For example, a company selling a generation asset will typically receive a wide range of bids, and most, if not all, of those bids are likely to be reasonable, *i.e.*, developed using a sound analytical framework and reasonable projections. Under the ISO-NE proposal, however, the Commission is asked to believe that the IMM can fulfill this role better than the market itself and can find the one, "correct" answer.[10]

23. Dr. McDonald also states that the process used to create retirement bids by the IMM will be similar to those for calculating Static De-List Bids. There are, however, important differences. Static De-List Bids are for a single initial year, and it is not necessary to include a range of forecast year capacity prices, revenues and outcomes in calculating Static De-List Bids.[11] Retirement bids necessarily must cover multiple years, significantly increasing both the sensitivity of the results to future forecast parameters and the challenge of predicting those future parameters accurately.

24. Dr. McDonald states that the Commission will be able to review the IMM-recommended bids and supporting materials and issue an order determining the appropriate bids.[12] Elsewhere ISO-NE states that the Commission will determine whether the IMM-recommended bids are "just and reasonable" and therefore can be used.

25. It is my understanding that "just and reasonable" is a broad legal test, and that, as a general rule, there is no single "just and reasonable" rate. It is my further understanding that where the rate proposed in a Section 205 filing is "just and reasonable," the Commission cannot reject that rate, even if there are other alternatives that are equally or even more "just and reasonable." Against that backdrop, it is problematic that ISO-NE will be making the Section 205 filing with respect to a capacity supplier's exit bid. Given the imprecision inherent in the exercise and the fact that reasonable experts can reach different conclusions, it is entirely possible that both the IMM-recommended bid and the capacity supplier's bid will fall within what is known as the "zone of reasonableness." Indeed, ISO-NE has not shown (and there is no reason to assume) that the IMM's

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9 As a thought experiment, I imagine that if one gave a retirement pricing problem like this to ten different energy economists in ten different rooms one would probably get ten different answers. But as George Bernard Shaw said: "If all the economists were laid end-to-end they'd never reach a conclusion."

10 If it were possible for an agency such as the IMM acting as a central authority to make all of these long-term forward-looking decisions efficiently, it is not clear why a market is needed at all. In such a case, a central planner could make all entry and exit decisions and avoid the considerable costs of operating a market.

11 Even for a Static De-List Bid it is necessary to forecast net energy revenues for a unit, which is difficult enough. This is significantly harder for Retirement De-List Bids, where energy net revenues must be forecast over many future years.

12 McDonald Testimony at page 23.

analysis will produce retirement bids that are more just and reasonable or that are more representative of competitive market prices than the supplier's analysis. In such a circumstance, however, I understand that the Commission will have no choice but to accept the IMM-recommended bid, and the reasonableness of the capacity supplier's bid will be irrelevant. This appears effectively arbitrary, and contrary to sound regulatory policy.

26. Where both the supplier's own bid and the IMM-recommended bid fall within the "just and reasonable" range of prices, the use of the IMM's bid in the FCA can result in lower clearing prices and can have substantial impacts on consumers and suppliers, as described in the previous section. Market participants have better information than outside parties (such as the IMM) over their costs and prospects, and regulators typically trust their judgments unless these are shown to be unduly influenced by market power or other incentives. ISO-NE's proposed allocation of Section 205 filing rights inverts this logic, and changes the question presented to the Commission in a fundamental way. Instead of asking whether the market participant's retirement bid is reasonable, the Commission will be asking whether the IMM's proposed bid is reasonable. Those are related, but critically different, questions.

27. In his testimony, Dr. McDonald considers but rejects the potential for over-mitigation.[13] This is due to the fact that he assumes that the IMM-determined and Commission-approved retirement bid price to be used by ISO-NE is the sole reasonable price. As I discussed previously, this is simply unlikely to be true. A broad range of prices may be reasonable, given the range of perfectly justifiable assumptions regarding market variables about which the IMM has no special insight over anyone else.

The ISO-NE proposals ignore existing regulatory controls

28. ISO-NE relies heavily on the concept of uneconomic retirements, driven by theoretical incentives to exert market power in the capacity market, as a justification for its proposed Retirement Reforms.[14] Several items are noteworthy here.

29. First, an uneconomic retirement is quite different even conceptually from some form of short-term withholding in terms of the costs to a capacity supplier. By retiring a capacity unit early, a capacity supplier would be forfeiting all future capacity and energy revenues from that unit, and not just revenues for a single period. This should reduce any economic incentive to undertake uneconomic retirements, as hypothesized by ISO-NE.

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13 McDonald Testimony at pages19-20.

14 See for example McDonald Testimony at pages 3-5.

30. Second, ISO-NE provides no direct evidence that retirement-based withholding is a significant issue in the New England FCM. The ISO-NE witnesses postulate various hypothetical scenarios but never refer to an actual problem in this regard. The Commission is asked, in effect, to ratify a major set of FCM rule changes against no presented evidence of a need.

31. Third, Dr. McDonald also ignores other existing regulatory controls which limit the scope for uneconomic retirements designed to affect prices. It is my understanding that capacity market prices and behavior are subject to broad behavioral controls common to all market participants. An announced large unit retirement is public, high profile and sure to attract scrutiny. A capacity resource owner could face substantial regulatory penalties in risking an uneconomic retirement designed to affect capacity or other market prices, as suggested by Dr. McDonald.

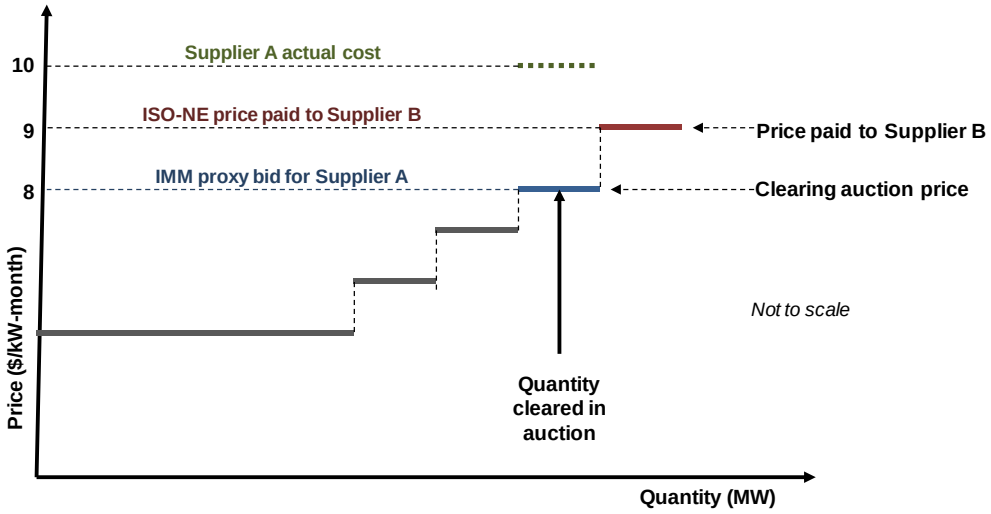
The use of proxy bids in retirements may result in price discrimination

32. When a capacity supplier elects to retire a unit unconditionally and fails the portfolio benefits test, ISO-NE proposes to use an IMM-determined (and Commission–reviewed) proxy bid in the FCA, clearing the auction as if the unit were available to take on a CSO if it clears. ISO-NE also proposes to use a similar approach under conditional retirements, when the submitted bid is greater than the IMM-calculated proxy bid. Of course, in both of these circumstances a retiring unit (whether unconditionally retiring or when the clearing price is below the submitted bid in conditional retirements) will not be available to take on a CSO, and the proxy bid, if it clears in the FCA is not backed by actual capacity. The FCM is then cleared based on a fictional resource which may cause the auction to clear short of the auction demand.

33. In this case, under the Retirement Reform proposals ISO-NE proposes to acquire additional capacity from other resources, outside of the primary clearing auction. It is likely that such capacity would be acquired at a higher capacity price, or it would be expected to have cleared in the FCA the first time.

34. This situation is illustrated in Figure 1. Assume for example that capacity supplier A believes that the unit needs $10/kW-month, but that the IMM sets the proxy bid at $8/kW-month. The proxy bid is the marginal bid and sets the price at $8/kW-month, but the unit is set to retire anyway. Therefore, ISO-NE re-runs the auction clearing algorithm and acquires additional capacity from capacity supplier B at $9/kW-month. ISO-NE is now paying two different prices for the same product at the same time, evidence of discriminatory pricing.

Figure 1: Price Discrimination through Proxy Bids in the FCA



35. This type of capacity buyer-side price discrimination (a preferable term in my view to buyer-side market power, since ISO-NE would not change the total amount of capacity acquired) has the potential to undermine FCM outcomes by suppressing capacity prices. Given the impact that even a $1/kW-month clearing price difference may have on total capacity market costs (and total supplier capacity revenues), as evidenced by ISO-NE's own witnesses, this may pose a future downside capacity risk to suppliers. I would expect that suppliers, locked in by sunk costs, might be wary of any mechanism that could allow capacity prices to be reduced while preserving reliability through purchases outside the primary clearing auction mechanism. It is my understanding that in other contexts (such as in the Minimum Offer Price Rule) the Commission has also expressed concerns that such "out-of-market" purchases could undermine the integrity of the single clearing price auction format used in the FCM. The scope for price suppression and discrimination engendered by the use of proxy bids and a re-running of the clearing algorithm is a significant flaw of the ISO-NE Retirement Reforms.

36. This proposal may also undermine dynamic efficiency in the New England capacity market. The great advantage of a clearing price capacity auction, as has long been noted, is that in a competitive market suppliers do not need to change their bids away from their true costs in order to achieve their optimal outcome – suppliers can bid their true costs and the market can clear optimally in a single run without participants needing to "guess" the outcome, as in a pay-as-bid auction. Such "guessing" has the scope to distort bidding behavior and create inefficient outcomes, as slightly infra-marginal units then have the incentive to set their bids to try to be the supplier who receives the higher "re-run" price.

The second run of the clearing algorithm, as advocated by ISO-NE, may introduce more problems than it solves, even under ISO-NE's own assumptions.

Conclusions of testimony

37. ISO-NE has proposed major Retirement Reforms to the FCM, predicated on theoretical concerns regarding the scope for exercising market power through uneconomic unit retirements. I have noted, however, that ISO-NE has provided little or no practical evidence that this is a substantial problem, and that it has ignored the existing behavioral and regulatory controls on participants in the New England capacity markets.

38. The core economic assumption of the proposed ISO-NE Retirement Reforms is that the IMM can calculate retirement prices (either for use in mitigated bids in priced retirements, or as proxy bids in unconditional and conditional retirements) more accurately than market participants themselves can. ISO-NE proposes a system in which the IMM-calculated bids are presented to the Commission for review and approval as "just and reasonable," while the participant's own retirement price calculation might never be reviewed in circumstances where the IMM rate cannot be proved to be "unjust and unreasonable," even though the participant's own rate may be equally just and reasonable or even more accurate. Given that there could be a wide range of "just and reasonable' bids, based on justifiable economic assumptions, this appears arbitrary.

39. Finally, ISO-NE proposes a proxy bid mechanism for unconditional and some conditional retirements in which it may re-run the capacity clearing algorithm a second time, paying a higher price than the one paid to most resources to secure additional needed capacity. This is contrary to the fundamental design of the FCA, and may result in price suppression and discrimination by ISO-NE. Such a mechanism should be avoided.

40. This concludes my testimony.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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) **Docket No. ER16-551-000**
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AFFIDAVIT OF SEABRON ADAMSON
ON BEHALF OF THE NEW ENGLAND POWER GENERATORS ASSOCIATION

I, Seabron Adamson, being duly sworn, depose and state that the foregoing Affidavit on behalf of the New England Power Generators Association is true, correct, accurate, and complete to the best of my knowledge, information, and belief.

Seabron Adamson

SUBSCRIBED AND SWORN to
before me this 11 day of January, 2016

Suzanne M. Walsh
Notary Public
My commission expires: 2/9/18

SUZANNE M. WALSH
MY COMM. EXPIRES
FEB. 9, 2018
NOTARY PUBLIC
COMMONWEALTH OF
MASSACHUSETTS

Exhibit SA-1

Qualifications and Experience of Seabron Adamson

SEABRON C. ADAMSON

Seabron Adamson is a Vice President in the Energy practice of Charles River Associates, where he focuses on the power sector and gas sectors. From to 2008 to 2010 he was an analyst with Tudor Investment Corporation, a major alternative investment firm, and continued in an advisory role with that firm until 2012.

Seabron was formerly a Vice President of CRA and co-Head of the firm's Energy and Environment practice from 2006 to 2008. In this role he led a team of 15-20 professionals in the Enterprise and Asset Investment group, focusing on the quantitative analysis of energy markets to support investment decisions. His clients included major investment banks, utilities, international energy companies, private equity firms, hedge and sovereign wealth funds and national and multilateral governmental and lending agencies.

Seabron also has significance experience in energy regulation and litigation matters, in North America, the European Union and other countries. Seabron has testified in international arbitration proceedings regarding energy sector disputes in Latin America, Canada and other countries. He has provided expert testimony before the Federal Energy Regulatory Commission, the Ontario Energy Board, and a state public utility commission.

Prior to joining CRA, he was a Director of Tabors Caramanis & Associates. Seabron was a co-founder of the Frontier Economics Group, an international economics consulting group. He previously founded the U.S. practice of London Economics and managed the American office until the company's sale in 1999. He was a consultant with London Economics, based in the U.K. from 1992 to 1996.

Seabron also serves as an adjunct lecturer at the A.B Freeman School of Business at Tulane University, where he has taught classes on energy trading, risk and portfolio management, and is a research associate of the Tulane Energy Institute. He has published a number of articles in peer-reviewed academic journals and conference proceedings on electricity and gas markets. He is the co-author of a recent book chapter on financial transmission rights markets.

EDUCATION

Boston University	M.A., Economics
M.I.T.	S.M., Technology and Policy
Georgia Tech	M.S., Applied Physics
Georgia Tech	B.S., Physics

EXPERIENCE HIGHLIGHTS

Present	Vice President, Charles River Associates.
2008 - 2012	Gas and Power Analyst, Tudor Investment Corporation, Boston, MA/London UK. Senior power and gas analyst for a major US alternative investment firm. Analyzed gas and power markets as part of the energy and commodities trading group, as well as developed trading models for gas markets. Advisory basis from 2010-2012.

2004 - 2008	Vice President (and Co-Head, Energy and Environment Practice), Charles River Associates, Boston, MA. Led a wide range of major consulting projects in the energy sector, especially focusing on investment valuation, due diligence and market analysis. Co-Head of the E&E practice from 2006-2008, and managed Enterprise and Asset Investment team of ~20 professionals within the practice.
2003 - 2004	Director, Tabors Caramanis & Associates. Managed projects on economic analysis of energy markets and energy sector asset valuations.
1999 - 2003	Founder and President, Frontier Economics Inc. Co-founder of Frontier Economics Group, an international economics consulting firm with offices in Cambridge, MA, London, UK and Melbourne, Australia. Managed major client assignments regarding litigation and energy market analysis. Provided extensive expert testimony on market competition issues, market design, and regulatory economics.
1996 -1999	President, London Economics Inc. Started US subsidiary of major European economics consulting firm. Advised major energy sector clients on market development, restructuring, retail competition, and mergers and acquisitions. Advised clients on significant M&A transactions.
1992 – 1996	Consultant, Senior Consultant and Managing Consultant, London Economics Ltd. (UK). Provided economic and strategic advice to major UK and international energy clients operating in the natural gas and electricity markets.
1990 – 1992	Research Assistant, Massachusetts Institute of Technology. Research on carbon reduction strategies for the US power industry sponsored by U.S. EPA and EPRI.
1988 –1990	Research engineer, Itek Optical Systems. Developed and implemented interferometry techniques for fabrication of the primary of the Keck 10-meter telescope, the world's largest optical telescope.

FIELDS OF EXPERTISE

- Energy Economics
- Energy Markets Design and Analysis
- Financial Analysis of Energy Sector Mergers and Acquisitions

PROFESSIONAL AFFILIATIONS

- International Association for Energy Economics
- Academic reviewer for *The Energy Journal*, *Energy Policy*, *Ecological Economics* and other journals.

PUBLICATIONS

Articles and Reviews

Seabron Adamson and A.J. Goulding, "The ABCs of Market Power Mitigation: Use of Auctioned Biddable Contracts to Enhance Competition in Generation Markets", *The Electricity Journal*, December, 1998.

S. Adamson and A. Sagar, "Managing Climate Risks through a Tradable Contingent Securities Approach", *Energy Policy*, January 2002.

Sabine Schnittger and Seabron Adamson, "Retail Competition in Electricity – Market Prices Revisited", *The Electricity Journal*, July 2001.

Seabron Adamson, "Industry Structures and Market Mechanisms", *Public Utilities Fortnightly*, April 1995.

S. Adamson, R. Laslett, R. Bates and A. Pototschnig, Market-Based Control of Air Pollution in Krakow, Poland: Can Economic Incentives Help? World Bank Technical Paper, 1994.

S. Adamson, "Auctioned Biddable Contracts for Mitigation of Electricity Market Power", presentation at an invited seminar at the Office of Economic Policy, Federal Energy Regulatory Commission, 1998.

Seabron Adamson and Kevin Wellenius, "Determination of Horizontal Market Power Abuse in Wholesale Electricity Markets", paper presented at the POWER conference, University of California at Berkeley, 2000.

S. Adamson, T. Noe and G. Parker, "Efficiency of Financial Transmission Rights Markets in Centrally Coordinated Periodic Auctions", *Energy Economics*, Vol. 32, No. 4, 2010.

S. Adamson and G. Parker, "Productivity and Technological Change in Shale Gas Production: An Econometric Analysis of Well Data from the Haynesville Shale", paper presented at the International Association of Energy Economics international conference, Stockholm, June 2011.

S. Adamson and G. Parker, "Participation and Efficiency in the New York Financial Transmissions Rights Markets", chapter in *Financial Transmission Rights: Analysis, Experiences and Prospects*, edited by J. Rossellon and T. Krisitansen, 2013.

S. Adamson and R. Tabors, "Pricing Short-term Gas Availability in Power Markets", *Growing Concerns, Possible Solutions: The Interdependency of Natural Gas and Electricity Systems*, MIT Energy Initiative, April 2013.

S. Adamson and S. Englander, "Efficiency of New York Transmission Congestion Contract Auctions", *Proceedings of the 38th Annual Hawaii International Conference on System Sciences*, 2005.

R. Tabors and S. Adamson, "Price Discrimination in Organized/Centralized Electric Power Markets", *Proceedings of the 39th Annual Hawaii International Conference on System Sciences*, 2006

R. Stoddard and S. Adamson, "Comparing Capacity Market and Payment Designs for Ensuring Supply Adequacy", *Proceedings of the 42th Annual Hawaii International Conference on System Sciences*, 2009.

Selected Expert Testimony and Reports (Last 10 Years)

Lead economic expert for investor-claimant in *Mesa Power LLC v. Government of Canada*, a major international arbitration regarding the Ontario renewable energy sector under the North American Free Trade Agreement.

Expert for the defendant in *Barton Windpower LLC and Buffalo Ridge I LLC v. Northern Indiana Public Service Company*, Civil Action No. 13-CV-05329, United States District Court for the Northern District of Illinois Eastern Division, 2015.

Expert for the Official Committee of the Unsecured Creditors *in re: Energy Futures Holdings Corp., et. al.*, Case 14-10979 (CSS), U.S. Bankruptcy Court for the District of Delaware.

Third appraiser (jointly appointed arbitrator) with respect to the valuation of Undivided Interests in a generating plant under the terms of the Facility Lease. Jointly appointed by the Lessee and Owner-Participant.

Testimony in an American Arbitration Association proceeding regarding the terms of an energy sales contract in the Northeast United States.

Testimony before an Ontario arbitration tribunal with respect to a major contract dispute for a gas-fired cogeneration plant;

Written testimony before FERC on market power and market-based rate authorization of PHI Holdings and affiliate companies (2002 and 2005);

Testimony in UNCITRAL arbitration in Geneva regarding an energy sales agreement in Latin America.

Testimony in ICC arbitration regarding coal generation technology licensing in China (settled before final hearing).

Testimony of Seabron C. Adamson on behalf of Calpine Corporation before the Federal Energy Regulatory Commission in Southern Power, Docket ER03-713, November 2003.

Prepared Testimony of Richard D. Tabors and Seabron C. Adamson on behalf of the New England Power Pool before the Federal Energy Regulatory Commission, Docket ER13-895-000, February 2013.

Written and oral testimony before the Régie d l'Ēnergie (Québec regulator) for Newfoundland and Labrador Hydro (Nalcor Energy) regarding transmission upgrade policy, Demande R-3888-2014.

Expert report (with J. Plewes) for Dayton Power & Light before the Public Utility Commission of Ohio regarding the value of solar renewable energy credits (SRECs)

Affidavit in support of comments of the NRG Companies before the Federal Energy Regulatory Commission regarding gas cost recovery issues in Docket No. ER14-1442-000.

Attachment B

The Berg Affidavit

PUBLIC VERSION – PRIVILEGED MATERIAL REMOVED

Attachment C

The Kranz Affidavit

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc.	**)**	**Docket No. ER16-551-000**

AFFIDAVIT OF BRAD KRANZ

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Brad Kranz. I am the Vice President of Asset Management – East Region at NRG Energy, Inc. My business address is 104 Carnegie Center, Princeton, NJ 08540.

Q. MR. KRANZ, PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I am an expert in electric power markets with professional experience that includes power plant engineering, power system operation, market design, regulatory affairs, business development and asset management. Before joining NRG, I worked for the New York Independent System Operator (NYISO) and its predecessor organization, the New York Power Pool, for eleven years where I held various positions in Operations, Engineering and Market Services. Before the NYISO, I was employed by Niagara Mohawk Power Corporation in upstate New York as an engineer at the Nine Mile Point Nuclear station. I hold a M.B.A from Union College and B.S. in Mechanical Engineering Technology from Rochester Institute of Technology.

Q. PLEASE DESCRIBE THE RESPONSIBILITIES OF YOUR CURRENT POSITION.

A. As the head of East Region Asset Management, I am responsible for overall profit and loss management of NRG's portfolio in the New England, New York and PJM markets. This includes a generating fleet of over 23,000 MW of simple cycle gas turbines, combined cycle gas turbines and steam boiler units fired by natural gas, oil and coal across nearly fifty different sites and nine states. The role of Asset Management encompasses the management and coordination across internal business functions and external stakeholders of all plant related aspects for operations, safety, compliance, marketing and strategy that may affect the profitability of the portfolio. It involves oversight of annual budgeting and ongoing investment in a facility, identifying commercial opportunities and coordinating wholesale market participation, asset optimization and strategic decision making.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. The purpose of my testimony is to provide insight into the considerations, process and decision making that leads to a resource retirement decision, the significant complexity

involved in such a decision, and the value of being able to make such retirement decisions at the latest date possible leading up to capacity auction deadlines. My testimony is divided into two sections. In the first section, I provide a brief description of ISO-NE's Non-Price Retirement Request as it exists today and ISO-NE's proposed revisions to the NPRR and market deadlines. Next, in the second section, I describe some recent experiences within the NRG fleet regarding the decision-making process for retirement of generating units highlighting how the dynamic nature of the regulatory environment, amongst many other contributing factors, influence retire decisions.

Overview of Non-Price Retirement Request and ISO-NE's Proposed Changes

Q. PLEASE DESCRIBE THE CURRENT NON-PRICE RESOURCE RETIREMENT REQUEST PROCESS.

A. Under the current rules, a Lead Market Participant wishing to retire a capacity resource from the capacity market has two choices: 1) A permanent de-list bid which if cleared in the auction permanently removes the resource from the forward capacity market or 2) a Non-Price Retirement Request which has no price associated with it and retires the resource from "all" markets. Permanent delist bids are submitted at the Existing Capacity Qualification deadline (June) for a Forward Capacity Auction (FCA) while a NPRR is submitted to ISO-NE between the Existing Capacity Qualification deadline (June) and 120 days prior to the relevant FCA.

Q. BRIEFLY DESCRIBE ISO-NE PROPOSED TARIFF CHANGES AS IT RELATES NON-PRICE RETIREMENTS.

A. In its December 17th filing, ISO-NE proposes a number of changes: 1) advance the deadline for submitting permanent de-list bids and retirement requests from June and October, respectively, to March; 2) move the Show of Interest (SOI) deadline from early February to April; 3) publish information about potential resource retirements on the ISO website prior to the SOI deadline to inform potential new entry of the announced retirements; and 4) eliminate the participant Non Price Retirement Request.

Under the ISO's proposal a participant may elect one of three resource retirement options with all options supported by participant-provided cost data. All submitted retirement bids would be binding and resources would be committed to a "retirement track," i.e., requiring retirement bids to be submitted for each subsequent FCA until the resource is retired, unless the IMM can be convinced to relieve the resource of such obligation. For option one a participant may submit its cost justification and resource bid to the IMM for review and filing with the Commission. In addition, the participant agrees to enter the auction under the Commission Approved retirement bid and if the bid clears, the resource retires from all markets. Option two allows the participant to elect an "unconditional" retirement from the forward capacity market. If the IMM finds the participant's capacity portfolio would experience an increase in revenue as a result of the "unconditional" resource retirement, a proxy resource would be entered in the FCA. If the proxy resource is awarded a Capacity Supply Obligation (CSO)] in the FCA the IMM would withdraw the proxy resource and run the FCA clearing engine a second time to replace the CSO

MW of the proxy resource. Resources awarded a CSO in the second run of the FCA would receive a price different, generally higher, than in the first run.

The third retirement option is a "conditional" resource retirement. Under this option a participant can elect to retain its own price for the FCA rather than the Commission Approved price. Under this election the IMM will enter into the FCA a proxy resource based on its estimate of the resource retirement bid. If the FCA clears at a price between the participant's retirement bid (e.g., $12/kW-month) and the IMM Proxy bid (e.g., $10/kW-month), say $11/Kw-month, the proxy resource is awarded a CSO at the FCA clearing price. In this case the IMM would then withdraw the proxy resource and run the FCA clearing engine a second time to replace the CSO MW of the proxy resource with actual MW from the FCA supply curve. Resources awarded a CSO in the second run of the FCA would receive a price different, generally higher, than in the first run.

NRG's Experience With Resource Retirements

Q. PLEASE DESCRIBE YOUR EXPERIENCES WITH RESPECT TO RESOURCE RETIREMENTS IN THE NEW ENGLAND MARKETS OR OTHER MARKETS?

In recent years, NRG has retired two plants in New England (Norwalk Harbor and Somerset), and is currently in the process of retiring one plant (Huntley) and mothballing units at two others (Dunkirk and Astoria) in New York. In PJM, NRG has retired a number of units including Werner, Glen Gardner, Gilbert CT 1-4, Elrama and Niles. NRG has also reversed prior retirement decisions in several instances which are discussed later in my affidavit.

Q. PLEASE PROVIDE AN OVERVIEW OF THE CONSIDERATIONS AND PROCESS FOR DETERMINING WHEN A RESOURCE WILL RETIRE.

A. . For our existing resources, our efforts focus on ensuring safe and reliable service in our daily operation and maintenance practices together with making prudent longer-term investments that meet our required return for capital projects such as environmental upgrades and repowerings.

The first indicator for retirement is negative earnings or cash flow from a resource, typically taking into account both historical and projected revenues. After considering the available cost-containment strategies and revenue enhancing possibilities, we carefully and methodically review future drivers of cost and revenue for the specific resource, such as, but not limited to, the need for significant capital investments, including known or potential environmental regulations, recent and anticipated market revenues, factors affecting the fuel and emissions markets, regulatory risk from constantly evolving market rules, impact of federal and state policy objectives, evolving technologies, operating performance and the ability to fund operations and maintenance with anticipated market revenues in order to insure operations in a safe and compliant manner. The forecasting of many of these elements can be volatile so we evaluate performance including sensitivities based on a range of outcomes.

The inputs noted above feed into an evaluation process which can evolve, as the inputs change, over months, if not years in some cases, resulting in the ultimate decision to retire a resource in some instances only months before the actual plant closing. A recent example is the announced Huntley retirement in New York. NRG has made significant investments in Huntley to meet environmental requirements over the last decade. Ultimately, the sustained weak commodity and capacity price environment could no longer justify continued operation of the facility and resulted in the decision to retire the plant.

Q. WHEN EVALUATING A PLANT'S ECONOMICS, DOES NRG LOOK AT THE ENTIRE PORTFOLIO, OR DOES IT FOCUS ON THE SINGLE PLANT?

A. NRG's perspective is that each plant must stand on its own and should provide positive earnings and cash flow, so our approach to asset valuation and operation versus retirement decisions is to focus strictly on the individual plant. It is worth noting that a power plant portfolio, unlike a stock portfolio, is unlikely to benefit from diversity in the sense of some investments that may be experiencing a down cycle balancing other investments that are currently experiencing an up cycle. While relatively short-term commodity (fuel) price dynamics can have an impact on plant economics, retirement decisions are more likely driven by longer-term cycles, supply-demand fundamentals in the capacity market or regulatory changes that increase operating costs or trigger large capital investment. As a result, NRG evaluates and makes retirement decisions with respect to each plant on its own, without regard to its impact on the broader portfolio.

Q. WHAT ARE SOME OF THE CHALLENGES OF OPERATING A PLANT FOR AN EXTENDED PERIOD ONCE A RETIREMENT DECISION HAS BEEN ANNOUNCED?

A. Once we have announced plans to retire a facility, it is extremely important that we continue to keep employees focused on operating the plant safely, reliably, and in compliance with all regulations. In addition, once a retirement is announced, workers at the plant understandably begin looking for other opportunities that offer prospects for long-term employment either within the company or externally. As a result, retaining an experienced and skilled workforce can be difficult once a shutdown is announced. The loss of technical expertise, the impact on our employees and the host communities is often of great concern. As such, retirement decisions are made after significant consideration of many factors. The 'retirement track' aspect of ISO-NE's proposal is thus extremely problematic and will intensify the effect of these concerns. As challenging as it is to manage personnel with the nearly four year advance notice of retirement required by the forward capacity market, the ISO's proposal for a 'retirement track' would create a situation in which, even if a plant's retirement bid did not clear in an auction and thus the plant took on a CSO, the plant would be identified as a retirement candidate in subsequent auctions, regardless of future financial performance. The stigma would amplify the challenges associated with managing personnel and community relations.

Q. PLEASE SUMMARIZE THE ELEMENTS OF A FINAL DECISION TO RETIRE A RESOURCE?

A. Recognizing that once a retirement decision is set in motion it is not easily undone and therefore there is an inherent bias towards deferring such action as long as possible. Events or considerations that can trigger the need to proceed with a retirement include a forecast of sustained operating losses due to market and economic conditions and/or the need to commit significant capital or major maintenance expenditures which cannot be justified based on the plant's economic outlook. Once the recommendation is confirmed, the ultimate decision is one of the most difficult decisions senior management makes with the approval of the Board of Directors.

Q. IN YOUR EXPERIENCE HAS NRG ENCOUNTERED A SITUATION WHERE A DECISION TO RETIRE A RESOURCE WAS ACTUALLY REVERSED RESULTING IN THE PLANT STAYING ACTIVE AND OPERATIONAL? COULD YOU PROVIDE AN EXAMPLE OF THE CHANGED CONDITIONS AND TIMING WHICH DROVE SUCH AN OUTCOME?

A. Yes, NRG has experience changing course after the decision to retire a generation plant. The decision to not retire a generation resource can be driven by multiple factors. In NRG's experience we have reversed retirement decisions due to the following:

- changes in market economics (e.g., increases in forward prices);
- changes in unit economics (e.g., alternative and/or less costly environmental compliance solutions);
- changes in environmental rules and their implementation timeline;
- changes in unit ownership.

One example of how a dynamic regulatory environment has caused NRG to adjust its capacity auction participation plans can be illustrated with five coal units in Maryland. NRG delayed action on pending deactivation notifications as the result of proposed environmental regulations that originally required investment in controls that could neither be economically justified nor implemented in time to meet the proposed effective date. As the regulations were further developed the deactivations were deferred due to modifications in the regulation's details and timing

Similarly, NRG has reversed both retirement and continued operation decisions of predecessor management, for example following the merger with GenOn, based on a complete review of updated information regarding engineering and construction options, compliance costs and changing market rules.

To get a sense of how often retirement decisions may change one need only look to a larger market where a larger resource population presents more evidence of such decisions. PJM's "Withdrawn Deactivation Request" worksheet (http://pjm.com/~/media/planning/gen-retire/withdrawn-deactivation-requests.ashx)

provides broad examples to observe that generation owners do, in fact, change course even after the well-considered decision to retire a generation resource is made.

Q. IS THAT THE END OF YOUR TESTIMONY?

A. Yes

BRAD KRANZ attests and states: that the prepared statements contained in the foregoing Affidavit of Brad Kranz are true and correct to the best of his knowledge and belief.

Brad Kranz

Dated: January 8, 2016

Attachment D

Proposed Protective Order

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc. **)** **Docket No. ER16-551-000**

PROTECTIVE ORDER

1. This Protective Order shall govern the use of all Protected Materials produced by, or on behalf of, any Participant. Notwithstanding any order terminating this proceeding, this Protective Order shall remain in effect until specifically modified or terminated by the Federal Energy Regulatory Commission (the "Commission").

2. This Protective Order applies to the following two categories of materials: (A) a Participant may designate as protected those materials which customarily are treated by that Participant as sensitive or proprietary, which are not available to the public, and which, if disclosed freely, would subject that Participant or its customers to risk of competitive disadvantage or other business injury; and (B) a Participant shall designate as protected those materials which contain critical energy infrastructure information, as defined in 18 C.F.R. § 388.113(c)(1) ("Critical Energy Infrastructure Information").

3. Definitions – For purposes of this Protective Order:

(a) The term "Participant" shall mean a Participant as defined in 18 C.F.R. § 385.102(b) in the above dockets.

(b) Protected Materials

(1) The term "Protected Materials" means (A) materials (including depositions) provided by a Participant in response to discovery requests and designated by such Participant as protected; (B) any information contained in or obtained from such designated materials; (C) any other materials which are made subject to this Protective Order by the Commission, by any court or other body having appropriate authority, or by agreement of the Participants; (D) notes of Protected Materials; and (E) copies of Protected Materials. The Participant producing the Protected Materials shall physically mark them on each page as "**PROTECTED MATERIALS PROVIDED PURSUANT TO PROTECTIVE ORDER**" or with words of similar import as long as the term "Protected Materials" is included in that designation to indicate that they are Protected Materials. In addition:

(i) If the Protected Materials contain Critical Energy Infrastructure Information, the Participant producing such information shall additionally mark on each page containing such information the words "**CONTAINS CRITICAL ENERGY INFRASTRUCTURE INFORMATION – DO NOT RELEASE.**"

(ii) If the Protected Materials contain market sensitive information, public disclosure of which the disclosing Participant believes in good faith would competitively harm the Participant, the disclosing Participant shall additionally mark on each page containing such information the words "**HIGHLY SENSITIVE PROTECTED MATERIALS**." Except for the more limited list of persons who qualify as Reviewing Representatives for purposes of reviewing Highly Sensitive Protected Materials, such materials are subject to the same provisions in the Protective Order as Protected Materials.

(2) The term "Notes of Protected Materials" means memoranda, handwritten notes, or any other form of information (including electronic form) which copies or discloses materials described in Paragraph 3(b)(1). Notes of Protected Materials are subject to the same restrictions provided in this Protective Order for Protected Materials except as specifically provided in this Protective Order.

(3) Protected Materials shall not include (A) any information or document contained in the files of the Commission (unless the information or documents were submitted to the Commission subject to a request for privileged treatment pursuant to 18 C.F.R. § 388.112, and such information or documents is accorded privileged treatment by the Commission), or any other federal or state agency, or any federal or state court, unless the information or document has been determined to be protected by such agency or court, (B) information that is public knowledge, or which becomes public knowledge, other than through disclosure in violation of this Protective Order, or (C) any information or document labeled as "Non-Internet Public" by a Participant, or in accordance with Paragraph 30 of FERC Order No. 630, FERC Stats. & Regs. ¶ 31,140. Protected Materials do include any information or document contained in the files of the Commission that has been designated as Critical Energy Infrastructure Information.

(c) Non-Disclosure Certificates

(1) The term "Non-Disclosure Certificate" shall mean the certificate annexed hereto by which Participants who have been granted access to Protected Materials shall certify their understanding that such access to Protected Materials is provided pursuant to the terms and restrictions of this Protective Order, and that such Participants have read the Protective Order and agree to be bound by it. All Non-Disclosure Certificates shall be served on all parties on the official service list maintained by the Secretary in this proceeding.

(2) The term "Non-Disclosure Certificate for Competitive Duty Personnel" means the certificate annexed hereto by which Competitive Duty Personnel shall certify their understanding of the terms of their access pursuant to the terms and restrictions of this Protective Order and that such representatives have read the terms and restrictions of this Protective Order applicable to such materials and agree to be bound by them. All Non-Disclosure Certificates for Competitive Duty Personnel shall be served on all parties on the official service list maintained by the Secretary in this proceeding.

(d) The term "Reviewing Representative" shall mean a person who has signed a Non-Disclosure Certificate and:

(1) For purposes of reviewing Protected Materials not covered by Paragraph 3(b)(1)(ii), who is:

(A) An attorney who has made an appearance in this proceeding for a Participant;

(B) Attorneys, paralegals, and other employees associated for purposes of this case with an attorney described in Paragraph 3(d)(1)(A);

(C) An expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for or testifying in this proceeding;

(D) A person designated as a Reviewing Representative by order of the Commission; or

(E) Employees or other representatives of Participants appearing in this proceeding with significant responsibility for this docket.

(2) For purposes of reviewing Highly Sensitive Protected Materials covered by Paragraph 3(b)(1)(ii), who is:

(A) A member or staff of any state or local utilities commission which is a Participant;

(B) An outside attorney who has made an appearance in this proceeding for a Participant;

(C) An attorney, paralegal, or other employee of the firm of the outside attorney described in Paragraph 3(d)(2)(B) working with such outside attorney for purposes of this case;

(D) An employee of ISO New England Inc.;

(E) An employee of Potomac Economics, Ltd. in its capacity as the External Market Monitor for ISO New England Inc.;

(F) An outside expert or an employee of an outside expert retained by a Participant for the purpose of advising, preparing for or testifying in this proceeding who is working under the direction of an attorney described in Paragraph 3(d)(2)(B) or 3(d)(2)(C) and who is an unaffiliated expert (or employees thereof) not directly involved in, or having direct or supervisory responsibilities over, the purchase, sale, or marketing of electricity (including transmission service) at retail or wholesale, the negotiation or development of participation or cost-sharing arrangements for transmission or generation facilities, or other activities or transactions of a type with respect to which the

disclosure of Highly Sensitive Protected Materials may present an unreasonable risk of harm;

(G) If, after a good faith effort, parties fail to agree on designating a specifically-named inside employee(s) of a non-governmental Participant as a Reviewing Representative for the review of specific Highly Sensitive Protected Material(s) or all Highly Sensitive Protected Material(s), a party may request that the Commission so-designate such a specifically-named inside employee(s) who, for example, is not directly involved in, or having direct or supervisory responsibilities over, the purchase, sale, or marketing of electricity (including transmission service) at retail or wholesale, the negotiation or development of participation or cost-sharing arrangements for transmission or generation facilities, or other activities or transactions of a type with respect to which the disclosure of Highly Sensitive Protected Materials may present an unreasonable risk of harm; or

(H) A person designated as a Reviewing Representative by order of the Commission specifically ruling on and indicating each such person by name.

4. Protected Materials shall be made available under the terms of this Protective Order only to Participants and only through their Reviewing Representatives.

5. Protected Materials shall remain available to Participants until the later of the date that an order terminating this proceeding becomes no longer subject to judicial review, or the date that any other Commission proceeding relating to the Protected Materials is concluded and no longer subject to judicial review. If requested to do so in writing after that date, the Participants shall, within fifteen (15) days of such request, return the Protected Materials (excluding Notes of Protected Materials) to the Participant that produced them, or shall destroy the materials, except that copies of filings, official transcripts, and exhibits in this proceeding that contain Protected Materials, and Notes of Protected Material may be retained, if they are maintained in accordance with Paragraphs 6 and 7. Within such time period each Participant, if requested to do so, shall also submit to the producing Participant an affidavit stating that, to the best of its knowledge, all Protected Materials and all Notes of Protected Materials have been returned or have been destroyed or will be maintained in accordance with Paragraphs 6 and 7. To the extent Protected Materials are not returned or destroyed, they shall remain subject to the Protective Order.

6. All Protected Materials shall be maintained by the Participant in a secure place. Access to those materials shall be limited to those Reviewing Representatives specifically authorized pursuant to Paragraphs 8 and 9. The Secretary shall place any Protected Materials filed with the Commission in a non-public file. By placing such documents in a non-public file, the Commission is not making a determination of any claim of privilege. The Commission retains the right to make determinations regarding any claim of privilege and the discretion to release information necessary to carry out its jurisdictional responsibilities. For documents submitted to Commission Staff ("Staff"), Staff shall follow the notification procedures of 18 C.F.R. § 388.112 before making public any Protected Materials.

7. Protected Materials shall be treated as confidential by each Participant and by the Reviewing Representative in accordance with the Non-Disclosure Certificate executed pursuant to Paragraph 9. Protected Materials shall not be used except as necessary for the conduct of this proceeding, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in the conduct of this proceeding and who needs to know the information in order to carry out that person's responsibilities in this proceeding. Reviewing Representatives may make copies of Protected Materials, but such copies become Protected Materials. Reviewing Representatives may make notes of Protected Materials, which shall be treated as Notes of Protected Materials if they disclose the contents of Protected Materials.

8. (a) If a Reviewing Representative's scope of employment includes the marketing of energy or generation assets, the direct supervision of any employee or employees whose duties include the marketing of energy or generation assets, the provision of consulting services to any person whose duties include the marketing of energy or generation assets, or the direct supervision of any employee or employees whose duties include the marketing of energy or generation assets, such Reviewing Representative may not use information contained in any Protected Materials obtained through this proceeding to give any Participant or any competitor of any Participant a commercial advantage.

(b) In the event that a Participant wishes to designate as a Reviewing Representative a person not described in Paragraph 3(d), the Participant shall seek agreement from the Participant providing the Protected Materials. If an agreement is reached, that person shall be a Reviewing Representative pursuant to Paragraph 3(d) with respect to those materials. If no agreement is reached, the Participant shall submit the disputed designation to the Commission for resolution.

9. (a) A Reviewing Representative shall not be permitted to inspect, participate in discussions regarding, or otherwise be permitted access to Protected Materials pursuant to this Protective Order unless that Reviewing Representative has first executed a Non-Disclosure Certificate or, in the case of Competitive Duty Personnel, a Non-Disclosure Certificate for Competitive Duty Personnel; provided that if an attorney qualified as a Reviewing Representative has executed such a certificate, the paralegals, secretarial, and clerical personnel employed by the same entity as the attorney and under the attorney's instruction, supervision, or control need not do so. A copy of each Non-Disclosure Certificate and Non-Disclosure Certificate for Competitive Duty Personnel shall be provided to counsel for the Participant asserting confidentiality prior to disclosure of any Protected Material to that Reviewing Representative.

(b) Attorneys qualified as Reviewing Representatives are responsible for ensuring that persons under their supervision or control comply with this order.

10. Any Reviewing Representative may disclose Protected Materials to any other Reviewing Representative entitled to receive the specific category of Protected Materials under Paragraph 3(b)(1), as long as the disclosing Reviewing Representative and the receiving Reviewing Representative both have executed a Non-Disclosure Certificate. In the event that any Reviewing Representative to whom the Protected Materials are disclosed ceases to be engaged in these proceedings, or is employed or retained for a position whose occupant is not qualified to be a Reviewing Representative under Paragraph 3(d), access to Protected Materials by that person

shall be terminated. Even if no longer engaged in this proceeding, every person who has executed a Non-Disclosure Certificate shall continue to be bound by the provisions of this Protective Order and the certification.

11. Subject to Paragraph 18, the Commission shall resolve any disputes arising under this Protective Order. Prior to presenting any dispute under this Protective Order to the Commission, the parties to the dispute shall use their best efforts to resolve it. Any Participant that contests the designation of materials as protected shall notify the party that provided the Protected Materials by specifying in writing the materials whose designation is contested. This Protective Order shall automatically cease to apply to such materials fifteen (15) business days after the notification is made unless the designator, within said 15-day period, files a motion with the Commission, with supporting affidavits, demonstrating that the materials should continue to be protected. In any challenge to the designation of materials as protected, the burden of proof shall be on the Participant seeking protection. If the Commission finds that the materials at issue are not entitled to protection, the procedures of Paragraph 18 shall apply. The procedures described above shall not apply to Protected Materials designated by a Participant as Critical Energy Infrastructure Information. Materials so designated shall remain protected and subject to the provisions of this Protective Order, unless a Participant requests and obtains a determination from the Commission's Critical Energy Infrastructure Information Coordinator that such materials need not remain protected.

12. Unless filed or served electronically, all copies of all documents reflecting Protected Materials, including the portion of other documents which refer to Protected Materials, shall be filed and served in sealed envelopes or other appropriate containers endorsed to the effect that they are sealed pursuant to this Protective Order. Such documents shall be marked "**PROTECTED MATERIALS PROVIDED PURSUANT TO PROTECTIVE ORDER**" (or words of similar import) with the appropriate designation (as relevant) under Paragraph 3(b)(1) and shall be filed under seal and served under seal upon the Commission and all Reviewing Representatives who are on the service list. Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information – Do Not Release." For anything filed under seal, redacted versions or, where an entire document is protected, a letter indicating such will also be filed with the Commission and served on all parties on the service list. Counsel for the producing Participant shall provide to all Participants who request the same, a list of Reviewing Representatives who are entitled to receive such material. Counsel shall take all reasonable precautions necessary to assure that Protected Materials are not distributed to unauthorized persons.

13. If any Participant desires to include, utilize, or refer to any Protected Materials or information derived there from in testimony or exhibits in these proceedings in such a manner that might require disclosure of such material to persons other than Reviewing Representatives, such Participant shall first notify both counsel for the disclosing participant and the Commission of such desire, identifying with particularity each of the Protected Materials. Thereafter, use of such Protected Material will be governed by procedures determined by the Commission.

14. Nothing in this Protective Order shall be construed as precluding any Participant from objecting to the use of Protected Materials on any legal grounds.

15. Nothing in this Protective Order shall preclude any Participant from requesting the Commission, or any other body having appropriate authority, to find that this Protective Order should not apply to all or any materials previously designated as Protected Materials pursuant to this Protective Order. The Commission may alter or amend this Protective Order as circumstances warrant at any time during the course of this proceeding.

16. Each party governed by this Protective Order has the right to seek changes in it as appropriate from the Commission.

17. Unless filed or served electronically, all Protected Materials filed with the Commission, or any other judicial or administrative body, in support of, or as a part of, a motion, other pleading, brief, or other document, shall be filed and served in sealed envelopes or other appropriate containers bearing prominent markings indicating that the contents include Protected Materials subject to this Protective Order and with the appropriate designation (as relevant) under Paragraph 3(b)(1). Such documents containing Critical Energy Infrastructure Information shall be additionally marked "Contains Critical Energy Infrastructure Information – Do Not Release."

18. If the Commission finds at any time in the course of this proceeding that all or part of the Protected Materials need not be protected, those materials shall, nevertheless, be subject to the protection afforded by this Protective Order for a time period designated by the Commission, but not less than 15 business days from the date of issuance of the Commission's decision. None of the Participants waives its rights to seek additional administrative or judicial remedies after the Commission's decision respecting Protected Materials or Reviewing Representatives, or the Commission's denial of any appeal thereof. The provisions of 18 C.F.R. § 388.112 shall apply to any requests for Protected Materials in the files of the Commission under the Freedom of Information Act (5 U.S.C. § 552).

19. Nothing in this Protective Order shall be deemed to preclude any Participant from independently seeking through discovery in any other administrative or judicial proceeding information or materials produced in this proceeding under this Protective Order.

20. None of the Participants waives the right to pursue any other legal or equitable remedies that may be available in the event of actual or anticipated disclosure of Protected Materials.

21. The contents of Protected Materials or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with this Protective Order and shall be used only in connection with this proceeding. Any violation of this Protective Order and of any Non-Disclosure Certificate executed hereunder shall constitute a violation of an order of the Commission.

22. If a Participant believes that Protected Materials previously distributed to Reviewing Representatives was not marked as Protected Materials or was not marked with the appropriate designation under Paragraph 3(b)(1), the Participant must e-mail Participants on the restricted service list and the listserv established for e-mail addresses in this proceeding, specifically state which documents contain such data, identify the specific material which should have received the designation, and seek their consent to such treatment, and such consent shall not be

unreasonably withheld. If no agreement is reached, the Participant shall submit the dispute to the Commission.

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc.) Docket No. ER16-551-000

NON-DISCLOSURE CERTIFICATE

I hereby certify my understanding that access to Protected Materials in the above-captioned case, including any Protected Materials designated as "Highly Sensitive Protected Materials," is provided to me pursuant to the terms and restrictions of the Protective Order in this proceeding, that I have been given a copy of and have read the Protective Order, and that I agree to be bound by it. I understand that the contents of the Protected Materials, any notes or other memoranda, or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with that Protective Order and shall be used only in connection with this proceeding. I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission.

By: _____

Title: _____

Representing: _____

Date: _____

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

ISO New England Inc. **)** **Docket No. ER16-551-000**

NON-DISCLOSURE CERTIFICATE FOR COMPETITIVE DUTY PERSONNEL

I hereby certify my understanding that access to Protected Materials in the above-captioned case is provided to me pursuant to the terms and restrictions of the Protective Order in this proceeding, that I have been given a copy of and have read the Protective Order, and that I agree to be bound by it. I understand that the contents of the Protected Materials, any notes or other memoranda, or any other form of information that copies or discloses Protected Materials shall not be disclosed to anyone other than in accordance with that Protective Order and shall be used only in connection with this proceeding. I acknowledge that my duties and responsibilities include "Competitive Duties" as described in the Protective Order and, as such, I understand that I shall neither have access to, nor disclose, the contents of the Protected Materials that are marked "Contains Protected Material Not Available to Competitive Duty Personnel," any notes or other memoranda, or any other form of information that copies or discloses Protected Materials that are marked as "Contains Protected Material Not Available to Competitive Duty Personnel." I acknowledge that a violation of this certificate constitutes a violation of an order of the Federal Energy Regulatory Commission.

By: _____

Title: _____

Representing: _____

Date: _____